# Fall 2015 Levee Maintenance Deficiency Summary Report Overall LMA & Unit Ratings, including USACE Erosion Survey

#### Sacramento River Basin

MA0001 Sutter Maintenance Yard Maintenance	Overall LMA Rating	Total LMA Miles						
Area 0001	Α	16.76						
Rated Item		Maintena	nce Deficiancy		Enforc	ement	Design 8 Obsole	
Rateu item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Vegetation	0.04		0.04	0.24%	0.05			
Encroachments					1.84	1.22		
Animal Control	0.02		0.02	0.12%				
Erosion / Bank Caving	0.01		0.01	0.06%				
Supplemental								
2015 USACE Erosion Survey, DRAFT	0.68		0.68	4.06%				
DWR UCIP Field Study					0.30	0.13		
LMA Totals:	0.75	0.00	0.75	4.47%	2.19	1.35	0.00	0.00

Tuesday, January 05, 2016 15:56 Page 1 of 1

# LMA District Cover Sheet Fall 2015 Levee Inspection Results

# **Sutter Maintenance Yard Maintenance Area 0001**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)		
* Overall LMA Rating (Fall Only)			A			
	** Non-receipt of Su	ımmer or Winter Inspe	ection Reports may effec	ct overall annual rating.		
* SPRING INSPECTIONS: Overall maintenance deficiencies are rated		nined for the spring ins ria in the spring and in		ual maintenance		
FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indiction of risk.						
Comments						

#### **Unit Cover Sheet**

#### Fall 2015 Levee Inspection Results

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles
Unit No. 01 Sacramento River	Right	16.76

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			Α	
Date of Inspection	03/13/2015 - 03/13/2015		09/16/2015 - 09/16/2015	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Bryan Reniff Sutter Maintenance Yard		Bryan Reniff Sutter Maintenance Yard	

#### **Summer & Winter Inspections**

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

# Levee Inspection Report By Mile - Fall 2015

# **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start		Rating **	Α	Issue No.		19	
LM End		Issue Type +	Ма	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start	0		
Item		y Supplies &			0		0
пеш	Equipmen	oment			0		0
DWR ID DWR_MA0001_01_s _ 2013_19							
Action/Comments							
Inspector ( equipment		: The LMA ha	s emerg	ency suppli	es a	ind	

No Photos

LM Start		Rating **	Α	Issue No.		28	
LM End		Issue Type +	Ma	Location * WS		WS	
Catagony	Category Earthen Levee			GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Operations & Maintenance				0		0
пеш	Manuals			0			0
DWR ID DWR_MA0001_01_s _ 2013_28							
Action/Comments							
Inspector (	Inspector Comments: The LMA has O&M manuals.						

No Photos

LM Start		Rating **	Α	Issue No.		29	
LM End		Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Flood Pre	paredness &	Training	g			0
пеш					0		0
DWR ID	DWR_MA0	001_01_s _ 201	13_29				
		Action/	Comme	nts			
Inspector (	Comments	: The LMA co	mpleted	flood fight	train	ing in 2014.	

No Photos

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side

CR : Crown

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

# **Levee Inspection Report By Mile - Fall 2015**

# **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	0.04	Rating **	U	Issue No.		2	
LM End	0.23	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroach	Encroachments			88 °	39.215198°	
пеш				-122.001537 ° -122.004		-122.004775 °	
DWR ID	DWR_MA0	001_01_s _ 201	12_2				
		Action/	Comme	nts			
Building							



View of the building along the L/S toe.

LM Start	0.44	Rating **	М	Issue No.		1
LM End	0.49	Issue Type +	Ма	Location *		WS
Category	Suppleme	ental		GPS La	titud	le/Longitude
Calegory				Start	WS atitude/Longitude End 57 ° 39.158226	End
Item	2015 USACE Erosion Survey,			39.1579	57 °	39.158226 °
iteiii	DRAFT			-122.0219	Latitude/Longitude t End 7957 ° 39.158226	-122.021950 °
DWR ID						

Action/Comments

Inspector Comments: 2011 - Erosion occurring upstream and downstream of an irrigation diversion structure. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: SYC\_9-3\_L]

No Photo:	N	0	Ρ	h	O	to	S
-----------	---	---	---	---	---	----	---

LM Start	0.67	Rating **	U	Issue No.		7	
LM End	0.70	Issue Type +	En	Location *		LS	
Category	Earthen L	evee		GPS Latitude/Longitude			
Category	Category			Start		End	
Item	Encroachments			39.216533 °		39.216680 °	
Item				-122.012512 °		-122.012907 °	
DWR ID	DWR_MA0	001_01_s _ 201	12_7				
Action/Comments							
Building							



View of the buildings along the L/S toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	0.79	Rating **	U	Issue No.		8
LM End	0.93	Issue Type +	En	Location *	LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Encroach	Encroachments			82 °	39.218215
пеш				-122.014290 °		-122.016538
DWR ID	DWR_MA0	001_01_s _ 201	12_8			
		Action/	Comme	nts		
Building						

No Photos

LM Start	1.17	Rating **	М	Issue No.		639
LM End	1.17	Issue Type +	En	Location *		LS
Catagory	Suppleme	ental		GPS La	titud	le/Longitude
Category				Start		End
Item	DWR UCI	OWR UCIP Field Study			85 °	39.221685 °
Item				-122.01572	° 02	-122.015720 °
DWR ID						

#### Action/Comments

Inspector Comments: FS\_ID:44590

DS\_ID:16431 EP\_NO: 9481 FS\_HLM: 1.197 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Same as last inspection. No repairs have been made yet.Need pressure test/video inspection to determine integrity of pipe wall. WS-woody debris scattered along slope & bank. Erosion on bank near ditch. LS-discharge pipe heavily corroded & CMP section missing. This crossing was listed in the USACE Periodic Inspections as ID# USACE\_CESPK\_MA1C\_2010\_p\_0097 for debris & encroachment within 15 feet.7/18/2013 LS outlet was underwater and could not be inspected but nothing looks to have been changed 12/17/2013. Same as last inspection 6/18/2014. Same as

changed.12/17/2013 Same as last inspection.6/18/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal pipe (CMP) through the levee, slide gate on the waterward slope. (ABO No. 9481-1974, Roberts Ditch Irrigation Company) Crossing penetrates the levee at an angle. Other appurtances located at this crossing include slant pump, concrete distribution box and shed structure located 100 feet northeast from levee crossing. Flow is carried from concrete distribution box to slide gate via concrete lined ditch. This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 63+53). FS Date: 04/21/2015

Photo 1 of 3 : UCIP\_FA\_2015\_4788.jpg



Close up of appurtances located about 100 feet NE of levee crossing.

### Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	1.17	Rating **	М	Issue No.		639 (cont)
LM End	1.17	Issue Type +	En	Location *	Location *	
Catagony	Suppleme	ental		GPS La	titud	e/Longitude
Calegory	Category			Start		End
Item	DWR UCI	IP Field Study		39.22168	35 °	39.221685 °
пеш				-122.01572	20 °	-122.015720 °
DWR ID						·

Action/Comments

Inspector Comments: FS\_ID:44590

DS\_ID:16431 EP\_NO: 9481 FS\_HLM: 1.197

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 04/21/2015

UCIP Comments: 4/20/2015 Same as last inspection. No repairs have been made yet.Need pressure test/video inspection to determine integrity of pipe wall. WS-woody debris scattered along slope & bank. Erosion on bank near ditch. LS-discharge pipe heavily corroded & CMP section missing. This crossing was listed in the USACE Periodic Inspections as ID# USACE\_CESPK\_MA1C\_2010\_p\_0097 for debris & encroachment within 15 feet.7/18/2013 LS outlet was underwater and could not be inspected but nothing looks to have been changed.12/17/2013 Same as last inspection.6/18/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal pipe (CMP) through the levee, slide gate on the waterward slope. (ABO No. 9481-1974, Roberts Ditch Irrigation Company) Crossing penetrates the levee at an angle. Other appurtances located at this crossing include slant pump, concrete distribution box and shed structure located 100 feet northeast from levee crossing. Flow is carried from concrete distribution box to slide gate via concrete lined ditch. This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 63+53).

Photo 2 of 3: UCIP\_FA\_2015\_4789.jpg

Other appurtances associated with crossing-Structure, pump, distribution box, and power pole located on WS bank.

### Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	1.17	Rating **	М	Issue No.		639 (cont)
LM End	1.17	Issue Type +	En	Location *	Location *	
Catagony	Suppleme	ental		GPS La	titud	e/Longitude
Calegory	Category			Start		End
Item	DWR UCI	IP Field Study		39.22168	35 °	39.221685 °
пеш				-122.01572	20 °	-122.015720 °
DWR ID						·

Action/Comments

Inspector Comments: FS\_ID:44590

DS\_ID:16431 EP\_NO: 9481 FS\_HLM: 1.197

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Same as last inspection. No repairs have been made yet. Need pressure test/video inspection to determine integrity of pipe wall. WS-woody debris scattered along slope & bank. Erosion on bank near ditch. LS-discharge pipe heavily corroded & CMP section missing. This crossing was listed in the USACE Periodic Inspections as ID# USACE CESPK MA1C 2010 p 0097 for debris & encroachment within 15 feet.7/18/2013 LS outlet was underwater and could not be inspected but nothing looks to have been changed.12/17/2013 Same as last inspection.6/18/2014 Same as

last inspection.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal pipe (CMP) through the levee, slide gate on the waterward slope. (ABO No. 9481-1974, Roberts Ditch Irrigation Company) Crossing penetrates the levee at an angle. Other appurtances located at this crossing include slant pump, concrete distribution box and shed structure located 100 feet northeast from levee crossing. Flow is carried from concrete distribution box to slide gate via concrete lined ditch. This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 63+53). FS Date: 04/21/2015

Photo 3 of 3: UCIP\_FA\_2015\_4790.jpg



Overview of levee crown at crossing looking U/S.

LM Start	1.20	Rating **	U	Issue No.		6
LM End	1.34	Issue Type +	En	Location *	LS	
Category Earthen Levee			GPS Latitude/Longitude			
Category		Start		End		
Item	Encroach	Encroachments			19°	39.224063 °
item				-122.015747 °		-122.016080 °
DWR ID DWR_MA0001_01_s _ 2012_6						
Action/Comments						
D'C-L						

Ditch



View of ag. ditch along the L/S toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	1.92	Rating **	М	Issue No.		640	
LM End	1.92	Issue Type +	En	Location *		LS	
Category	Supplemental			GPS La	titud	le/Longitude	
Calegory				Start		End	
Item	DWR UCI	IP Field Study		39.2318	66°	39.231866	0
пеш				-122.0154	42 °	-122.015442	0
DWR ID							

#### Action/Comments

Inspector Comments: FS\_ID:44592

DS\_ID:16430 EP\_NO: 9487 FS\_HLM: 1.96

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 WS pipe end is plugged about 50% by soil.Remove dirt and debris in riser. Outlet deformed and blocked over 50%. Debris-round concrete section on landward side. This crossing

was listed in the USACE Periodic Inspections as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0116 for crossing outlet deformed and clogged with dirt.7/18/2013 WS pipe end has been reformed but is still clogged about 50% by sediment.12/17/2013 Same as last inspection.6/18/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 1 of 2: 36-inch corrugated metal pipe (CMP) through the levee. Slide gates in CMP riser on the waterward slope. (ABO No. 9487-1974, Jimeno Rancho) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 103+18).

FS Date: 04/21/2015



View of landward side looking upstream at crossing.

### Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	1.92	Rating **	М	Issue No.		640 (cont)
LM End	1.92	Issue Type +	En	Location *		LS
Category	Suppleme	nental GPS Latitude/Longitu				e/Longitude
Calegory				Start		End
Item	DWR UCI	IP Field Study		39.23186	66°	39.231866 °
item				-122.0154	42 °	-122.015442 °
DWR ID						·

Action/Comments

Inspector Comments: FS\_ID:44592

DS\_ID:16430 EP\_NO: 9487 FS\_HLM: 1.96

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 WS pipe end is plugged about 50% by soil.Remove dirt and debris in riser. Outlet deformed and blocked over 50%. Debris-round concrete section on landward side. This crossing

was listed in the USACE Periodic Inspections as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0116 for crossing outlet deformed and clogged with dirt.7/18/2013 WS pipe end has been reformed but is still clogged about 50% by sediment.12/17/2013 Same as last inspection.6/18/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 1 of 2: 36-inch corrugated metal pipe (CMP) through the levee. Slide gates in CMP riser on the waterward slope. (ABO No. 9487-1974, Jimeno Rancho) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 103+18).

FS Date: 04/21/2015



View of waterward side looking upstream at CMP riser on slope.

### Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	1.92	Rating **	М	Issue No.		640 (cont)	
LM End	1.92	Issue Type +	En	Location *		LS	
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.2318	66°	39.231866 °	
пеш				-122.0154	42 °	-122.015442 °	
DWR ID							

Action/Comments

Inspector Comments: FS\_ID:44592

DS\_ID:16430 EP\_NO: 9487 FS\_HLM: 1.96

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 WS pipe end is plugged about 50% by soil.Remove dirt and debris in riser. Outlet deformed and blocked over 50%. Debris-round concrete section on landward side. This crossing was listed in the USACE Periodic Inspections as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0116 for crossing outlet deformed and clogged with dirt.7/18/2013 WS pipe end has been reformed but is still clogged about 50% by sediment.12/17/2013 Same as last inspection.6/18/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 1 of 2: 36-inch corrugated metal pipe (CMP) through the levee. Slide gates in CMP riser on the waterward slope. (ABO No. 9487-1974, Jimeno Rancho) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 103+18).

FS Date: 04/21/2015



Overview of levee crown and slopes looking upstream towards crosing.

### Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	1.92	Rating **	М	Issue No.		641	
LM End	1.92	Issue Type +	En	Location *		LS	
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.23188	80°	39.231880 °	
пеш				-122.01543	32 °	-122.015432 °	
DWR ID							

Action/Comments

Inspector Comments: FS\_ID:44593

DS\_ID:17565 EP\_NO: 9487 FS\_HLM: 1.961

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 WS pipe end plugged about 50% by soil.WS-remove dirt and debris in riser. Outlet deformed and blocked over 50%. Burrow activity near outlet on waterward slope. Debris around concrete section on landward side. This crossing was listed in the USACE Periodic Inspections as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0116 for crossing outlet deformed and clogged with dirt.7/18/2013 WS pipe end has been reformed but is still partially blocked with dirt and debris.12/17/2013 Same as last inspection.6/18/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 2 of 2: 36-inch corrugated metal pipe (CMP) through the levee. Slide gates in CMP riser on the waterward slope. (ABO No. 9487-1974, Jimeno Rancho) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station

103+18).

FS Date: 04/21/2015



View of CMP risers located on waterward slope.

### Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	1.92	Rating **	М	Issue No.		641 (cont)
LM End	1.92	Issue Type +	En	Location *	LS	
Category	Supplemental			GPS La	tituc	le/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.23188	° 0	39.231880 °
пеш					2 °	-122.015432 °
DWR ID						

Action/Comments

Inspector Comments: FS\_ID:44593

DS\_ID:17565 EP\_NO: 9487 FS\_HLM: 1.961

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 WS pipe end plugged about 50% by soil.WS-remove dirt and debris in riser. Outlet deformed and blocked over 50%. Burrow activity near outlet on waterward slope. Debris around concrete section on landward side. This crossing was listed in the USACE Periodic Inspections as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0116 for crossing outlet deformed and clogged with dirt.7/18/2013 WS pipe end has been reformed but is still partially blocked with dirt and debris.12/17/2013 Same as last inspection.6/18/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 2 of 2: 36-inch corrugated metal pipe (CMP) through the levee. Slide gates in CMP riser on the waterward slope. (ABO No. 9487-1974, Jimeno Rancho) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station

103+18).

FS Date: 04/21/2015



View of levee crown and slopes looking upstream at crossing.

### Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	1.92	Rating **	М	Issue No.		641 (cont)	
LM End	1.92	Issue Type +	En	Location *	LS		
Category	Suppleme	nental GPS Latitude/Longitud			e/Longitude		
Calegory				Start		End	
Item	DWR UCI	IP Field Study		39.23188	0°	39.231880	٥
пеш				-122.01543	2 °	-122.015432	. 0
DWR ID							

Action/Comments

Inspector Comments: FS\_ID:44593

DS\_ID:17565 EP\_NO: 9487 FS\_HLM: 1.961

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 WS pipe end plugged about 50% by soil.WS-remove dirt and debris in riser. Outlet deformed and blocked over 50%. Burrow activity near outlet on waterward slope. Debris around concrete section on landward side. This crossing was listed in the USACE Periodic Inspections as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0116 for crossing outlet deformed and clogged with dirt.7/18/2013 WS pipe end has been reformed but is still partially blocked with dirt and debris.12/17/2013 Same as last inspection.6/18/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 2 of 2: 36-inch corrugated metal pipe (CMP) through the levee. Slide gates in CMP riser on the waterward slope. (ABO No. 9487-1974, Jimeno Rancho) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station

103+18).

FS Date: 04/21/2015



CMP pipe outlet deformed with over 50 percent blockage.

### Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	2.23	Rating **	М	Issue No.		642
LM End	2.23	Issue Type +	En	Location *		LS
Supplemental GPS Latitude/L				e/Longitude		
Category				Start		End
Item	DWR UCI	P Field Study		39.23599	3°	39.235993 °
пеш				-122.01297	0 °	-122.012970 °
DWR ID						·

Action/Comments

Inspector Comments: FS\_ID:44594

DS\_ID:16429 EP\_NO: 9472 FS\_HLM: 2.281

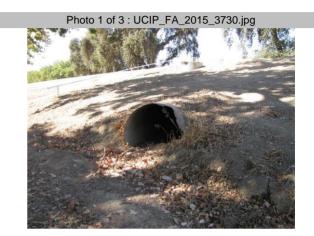
Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Same as last inspection. Remove debris from riser. Landward inlet is blocked by over 50%. This crossing was listed in the USACE Periodic Inspections as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0128 for sediment build up at inlet (landward side) and debris inside riser.7/18/2013 Same as last inspection.12/17/2013 Same as last inspection.6/18/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 54-inch corrugated metal drain pipe through the levee. Slide gate in CMP riser on the waterward slope. 48-inch corrugated metal pipe at landward slope. This crossing crosses the levee at an angle. (ABO No. 9472-1974, Ballard) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 120+00) dated 1955.

FS Date: 04/21/2015



View of outlet located at waterward toe.

### Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	2.23	Rating **	М	Issue No.		642 (cont)		
LM End	2.23	Issue Type +	En	Location *		LS		
Category	Suppleme	ental		GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P Field Study		39.23599	93 °	39.235993 °		
item				-122.01297	70 °	-122.012970 °		
DWR ID								

Action/Comments

Inspector Comments: FS\_ID:44594

DS\_ID:16429 EP\_NO: 9472 FS\_HLM: 2.281

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Same as last inspection. Remove debris from riser. Landward inlet is blocked by over 50%. This crossing was listed in the USACE Periodic Inspections as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0128 for sediment build up at inlet (landward side) and debris inside riser.7/18/2013 Same as last inspection.12/17/2013 Same as last inspection.6/18/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 54-inch corrugated metal drain pipe through the levee. Slide gate in CMP riser on the waterward slope. 48-inch corrugated metal pipe at landward slope. This crossing crosses the levee at an angle. (ABO No. 9472-1974, Ballard) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 120+00) dated 1955.

FS Date: 04/21/2015



View of levee crown looking downstream at crossing. CMP riser located on waterward shoulder.

### Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	2.23	Rating **	М	Issue No.	642 (cont)			
LM End	2.23	Issue Type +	En	Location *	LS			
Category	Supplemental			GPS Latitude/Longitude				
Calegory				Start		End		
Itom	DWR UCI	P Field Study		39.23599	3°	39.235993		
Item		-122.01297	0 °	-122.012970 °				
DWR ID								

Action/Comments

Inspector Comments: FS\_ID:44594

DS\_ID:16429 EP\_NO: 9472 FS\_HLM: 2.281

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Same as last inspection.Remove debris from riser. Landward inlet is blocked by over 50%. This crossing was listed in the USACE Periodic Inspections as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0128 for sediment build up at inlet

(landward side) and debris inside riser.7/18/2013 Same as last inspection.12/17/2013 Same as last inspection.6/18/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 54-inch corrugated metal drain pipe through the levee. Slide gate in CMP riser on the waterward slope. 48-inch corrugated metal pipe at landward slope. This crossing crosses the levee at an angle. (ABO No. 9472-1974, Ballard) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 120+00) dated 1955.

FS Date: 04/21/2015



View of waterward side looking at slope and channel.

### Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	2.25	Rating **	М	Issue No.		643			
LM End	2.25	Issue Type +	En	Location *		LS			
Category	Supplemental				GPS Latitude/Longitude				
Calegory				Start		End			
Item	DWR UCI	P Field Study		39.23617	78 °	39.236178 °			
item				-122.0128°	12 °	-122.012812 °			
DWR ID						·			

Action/Comments

Inspector Comments: FS\_ID:44595

DS\_ID:16428 EP\_NO: 9467 FS\_HLM: 2.297

Repair Type: Non-Urgent Crossing Status: Found

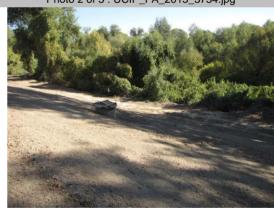
UCIP Comments: 4/20/2015 Same as last inspection.Only riser visible. Debris and sediment blocking gate. Gate inside riser is buried and non-functional. If crossing is abandoned, owner needs to properly abandon. This crossing was listed in the USACE Periodic Inspections as ID# USACE\_CESPK\_MA1C\_2010\_p\_0132 no culvert through the levee is visible here.7/18/2013 Same as last inspection.12/17/2013 Same as last inspection. 6/18/2014 Same as last inspection. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drain pipe through levee. Slide gate in CMP riser on the waterward slope. (ABO No. 9467-1974, Lovell E. Spurgeon) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 120+60) FS Date: 04/21/2015

LM Start	2.25	Rating **	М	Issue No.	643 (cont)
LM End	2.25	Issue Type +	En	Location *	LS



Unable to locate waterward outlet.

Photo 2 of 3: UCIP\_FA\_2015\_3734.jpg



View of waterward slope and toe.

# Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	2.25	Rating **	М	Issue No.		643 (cont)			
LM End	2.25	Issue Type +	En	Location *		LS			
Category	ental	GPS La	titud	e/Longitude					
Calegory	Category					End			
Item	DWR UCIP Field Study			39.23617	78 °	39.236178 °			
item				-122.01281	12 °	-122.012812 °			
DWR ID									
	Action/Comments								
Inspector (	Inspector Comments: FS_ID:44595								

DS\_ID:16428 EP\_NO: 9467 FS\_HLM: 2.297

Repair Type: Non-Urgent Crossing Status: Found



Overview of levee crown looking upstream at crossing.

LM Start	2.53	Rating **	U	Issue No.		20
LM End	2.55	Issue Type +	En	Location *		LS
Category Earthen Levee			GPS La	tituc	de/Longitude	
Calegory				Start		End
Item	Encroachi	ncroachments			50°	39.239955 °
item				-122.0103	90°	-122.010090 °
DWR ID	DWR_MA0	001_01_s _ 201	12_20			
		Action/	Comme	nts		
Building						



View of the house next to the levee.

### Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	2.81	Rating **	U	Issue No.		644
LM End	2.81	Issue Type +	En	Location *		LS
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory			Start		End	
Item	DWR UCI	P Field Study		39.24341	0 °	39.243410 °
пеш				-122.00839	3°	-122.008393 °
DWR ID						·

Action/Comments

Inspector Comments: FS\_ID:44741

DS\_ID:16416 EP\_NO: 9474 FS\_HLM: 2.869 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Positive closure device is missing and water cannot be prevented from flowing through pipe during high water. During high water flow goes through levee. Missing positive closure device on waterward side. This structure appears abandoned-slide gates have been removed. Crossing needs to be properly abandoned. This crossing was listed in the USACE Periodic Inspection as ID# USACE\_CESPK\_MA1C\_2010\_p\_0169 for concrete box partially filled with dirt.7/18/2013 Same as last inspection. 12/17/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 1 of 2: 60-inch concrete pipe through the levee. Slide gates in concrete well at the waterward toe. (ABO No. 9474-1974, George R. Zumwalt) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 150+06). O&M description is for 2-5 foot by 5 foot concrete culverts 2-slide gates hand operated. Culvert constructed with wing walls and gate well.

FS Date: 04/24/2015



Concrete distribution box located on waterward shoulder.

### Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	2.81	Rating **	U	Issue No.		644 (cont)	
LM End	2.81	Issue Type +	En	Location *		LS	
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	P Field Study		39.24341	0 °	39.243410 °	
item			-122.00839	3°	-122.008393 °		
DWR ID							

Action/Comments

Inspector Comments: FS\_ID:44741 DS\_ID:16416 EP\_NO: 9474

FS\_HLM: 2.869 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Positive closure device is missing and water cannot be prevented from flowing through pipe during high water. During high water flow goes through levee. Missing positive closure device on waterward side. This structure appears abandoned-slide gates have been removed. Crossing needs to be properly abandoned. This crossing was listed in the USACE Periodic Inspection as ID# USACE\_CESPK\_MA1C\_2010\_p\_0169 for concrete box partially filled with dirt.7/18/2013 Same as last inspection. 12/17/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 1 of 2: 60-inch concrete pipe through the levee. Slide gates in concrete well at the waterward toe. (ABO No. 9474-1974, George R. Zumwalt) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 150+06). O&M description is for 2-5 foot by 5 foot concrete culverts 2-slide gates hand operated. Culvert constructed with wing walls and gate well.

FS Date: 04/24/2015



Overview of levee crown looking downstream at crossing.

### Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	2.81	Rating **	U	Issue No.		644 (cont)	
LM End	2.81	Issue Type +	En	Location *		LS	
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.24341	0 °	39.243410 °	
itelli			-122.00839	3°	-122.008393 °		
DWR ID							

#### Action/Comments

Inspector Comments: FS\_ID:44741

DS\_ID:16416 EP\_NO: 9474 FS\_HLM: 2.869 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Positive closure device is missing and water cannot be prevented from flowing through pipe during high water. During high water flow goes through levee. Missing positive closure device on waterward side. This structure appears abandoned-slide gates have been removed. Crossing needs to be properly abandoned. This crossing was listed in the USACE Periodic Inspection as ID# USACE\_CESPK\_MA1C\_2010\_p\_0169 for concrete box partially filled with dirt.7/18/2013 Same as last inspection. 12/17/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 1 of 2: 60-inch concrete pipe through the levee. Slide gates in concrete well at the waterward toe. (ABO No. 9474-1974, George R. Zumwalt) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 150+06). O&M description is for 2-5 foot by 5 foot concrete culverts 2-slide gates hand operated. Culvert constructed with wing walls and gate well.

FS Date: 04/24/2015



View of concrete distribution box and headwall located on waterward side.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

### Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	2.81	Rating **	U	Issue No.		645	
LM End	2.81	Issue Type +	Type + En Location			LS	
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.24343	3°	39.243433 °	
item			-122.00838	6 °	-122.008386 °		
DWR ID							

Action/Comments

Inspector Comments: FS\_ID:44742

DS\_ID:17567 EP\_NO: 9474 FS\_HLM: 2.87 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Positive closure device is missing and water cannot be prevented from flowing through pipe during high water. During high water flow goes through levee. Missing positive closure device on waterward side. This structure appears abandoned-slide gates have been removed. Crossing needs to be properly abandoned. This crossing was listed in the USACE Periodic Inspection as ID# USACE\_CESPK\_MA1C\_2010\_p\_0169 for concrete box partially filled with dirt.7/18/2013 Same as last inspection. 12/17/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 2 of 2: 60-inch pipe through the levee. Crossing angles through levee. Slide gates in concrete well at the waterward toe. Slide gates missing. (ABO No. 9474-1974, George R. Zumwalt) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 150+06). O&M description is for 2-5 foot by 5 foot concrete culverts 2-slide gates hand operated. Culvert constructed with wing walls and gate well.

FS Date: 04/24/2015



Close up view of concrete distribution box located on waterward shoulder.

### Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	2.81	Rating **	U	Issue No.		645 (cont)	
LM End	2.81	Issue Type +	+ En Location *			LS	
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	IP Field Study		39.24343	3°	39.243433 °	
пеш			-122.00838	6°	-122.008386 °		
DWR ID							

Action/Comments

Inspector Comments: FS\_ID:44742

DS\_ID:17567 EP\_NO: 9474 FS\_HLM: 2.87 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Positive closure device is missing and water cannot be prevented from flowing through pipe during high water. During high water flow goes through levee. Missing positive closure device on waterward side. This structure appears abandoned-slide gates have been removed. Crossing needs to be properly abandoned. This crossing was listed in the USACE Periodic Inspection as ID# USACE\_CESPK\_MA1C\_2010\_p\_0169 for concrete box partially filled with dirt.7/18/2013 Same as last inspection.12/17/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 2 of 2: 60-inch pipe through the levee. Crossing angles through levee. Slide gates in concrete well at the waterward toe. Slide gates missing. (ABO No. 9474-1974, George R. Zumwalt) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 150+06). O&M description is for 2-5 foot by 5 foot concrete culverts 2-slide gates hand operated. Culvert constructed with wing walls and gate well.

FS Date: 04/24/2015



Overview of levee crown looking downstream at crossing.

### Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	2.81	Rating **	U	Issue No.		645 (cont)			
LM End	2.81	Issue Type +	En	Location *		LS			
Category	Supplemental					GPS Latitude/Longitude			
Calegory				Start		End			
Item	DWR UCI	P Field Study		39.24343	33°	39.243433 °			
item			-122.00838	86 °	-122.008386 °				
DWR ID									

Action/Comments

Inspector Comments: FS\_ID:44742

DS\_ID:17567 EP\_NO: 9474 FS\_HLM: 2.87 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Positive closure device is missing and water cannot be prevented from flowing through pipe during high water. During high water flow goes through levee. Missing positive closure device on waterward side. This structure appears abandoned-slide gates have been removed. Crossing needs to be properly abandoned. This crossing was listed in the USACE Periodic Inspection as ID# USACE\_CESPK\_MA1C\_2010\_p\_0169 for concrete box partially filled with dirt.7/18/2013 Same as last inspection.12/17/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 2 of 2: 60-inch pipe through the levee.
Crossing angles through levee. Slide gates in concrete well at the waterward toe. Slide gates missing. (ABO No. 9474-1974, George R. Zumwalt) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 150+06). O&M description is for 2-5 foot by 5 foot concrete culverts 2-slide gates hand operated. Culvert constructed with wing walls and gate well.

FS Date: 04/24/2015

Photo 3 of 3: UCIP\_FA\_2015\_4966.jpg



Concrete distribution box and headwall located on waterward side.

LM Start	3.05	Rating **	U	Issue No.		5	
LM End	3.70	Issue Type +	En	Location *		LS	
Category	evee	GPS La	titud	e/Longitude			
Calegory				Start		End	
Item	Encroach	ments		39.2468	22 °	39.256054 °	
пеш				-122.0081	46 °	-122.009808 °	
DWR ID	DWR_MA0	WR_MA0001_01_s _ 2012_5					
Action/Comments							
Ditch							



View of the ag. ditch & concrete building along the L/S toe.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Maintenance Deficiancy

C: Corrected Ob: Design & System Obsolescence

AW: Acceptable but Monitor & Maintain

\* Issue Type

Ma: Maintenance Deficiancy

Ob: Design & System Obsolescence

En: Enforcement

# Levee Inspection Report By Mile - Fall 2015

# **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	3.05	Rating **	С	Issue No.		72	
LM End	3.05	Issue Type +	En	Location *		WS	
Category	Earthen Levee (				titud	le/Longitude	
Calegory				Start		End	
Item	Encroach	ments		39.246855 °		39.246855	0
item				-122.00812	20°	-122.008120	0
DWR ID	DWR_MA0	001_01_s _ 201	15_72				
Action/Comments							
Tree or limb Inspector Comments: Sutter Yard remove the large tree.							

No Photos

LM Start	3.33	Rating **	М	Issue No.	646		
LM End	3.33	Issue Type +	En	Location *	WS		
Supplemental				GPS La	titud	le/Longitude	
Category			Start End				
Item	DWR UC	P Field Study		39.25084	13 °	39.250843 °	
iteiii				-122.00799	92 °	-122.007992 °	
DWR ID	ID						
Action/Comments							

Inspector Comments: FS\_ID:44599

DS\_ID:16426 EP\_NO: 9490 FS\_HLM: 3.4

Repair Type: Non-Urgent Crossing Status: Found





View of waterward side looking upstream.

### Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	3.33	Rating **	М	Issue No.		Issue No.		646 (cont)
LM End	3.33	Issue Type +	En	Location *		Location *		WS
Category	Suppleme		GPS Latitude/Longitude					
Calegory				Start		End		
Item	DWR UCI	P Field Study		39.25084	3°	39.250843 °		
пеш				-122.00799	2°	-122.007992 °		
DWR ID								

Action/Comments

Inspector Comments: FS\_ID:44599

DS\_ID:16426 EP\_NO: 9490 FS\_HLM: 3.4

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 LS inlet still has some minor sediment build up. Needs to be cleaned.LS pipe slightly deformed and sediment build up blocking about 30% of opening; need to check the condition of the slide gate-need photo. Metal marker down. This crossing was listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0187 for sediment build up at landward toe.7/18/2013 WS slide gate looks to be in good condition but stem is slightly bent. Not sure if bend will hinder gates operation or not. LS inlet is still blocked by minor sediment build up.12/17/2013 Same as last inspection.6/18/2014 Same as last inspection. FIELD\_STRUCT\_DESC: 36-inch drain pipe through the levee. Slide gate in CMP riser on the waterward slope. (Permit No. 9490-1955) This entry matches the Drainage and Irrigation structure referenced in O&M manual (Station 177+67). (USACE-1955)

FS Date: 04/21/2015



View of landward side looking upstream.

### Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	3.33	Rating **	М	Issue No.		646 (cont)	
LM End	3.33	Issue Type +	En	Location *		WS	
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study		39.2508	43 °	39.250843	0
item				-122.0079	92 °	-122.007992	0
DWR ID							

#### Action/Comments

Inspector Comments: FS\_ID:44599

DS\_ID:16426 EP\_NO: 9490 FS\_HLM: 3.4

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 LS inlet still has some minor sediment build up. Needs to be cleaned.LS pipe slightly deformed and sediment build up blocking about 30% of opening; need to check the condition of the slide gate-need photo. Metal marker down. This crossing was listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0187 for sediment build up at landward toe.7/18/2013 WS slide gate looks to be in good condition but stem is slightly bent. Not sure if bend will hinder gates operation or not. LS inlet is still blocked by minor sediment build up.12/17/2013 Same as last inspection.6/18/2014 Same as last inspection. FIELD\_STRUCT\_DESC: 36-inch drain pipe through the levee. Slide gate in CMP riser on the waterward slope. (Permit No. 9490-1955) This entry matches the Drainage and Irrigation structure referenced in O&M manual (Station 177+67). (USACE-1955)

FS Date: 04/21/2015



View of watwerward slope, riser with slide gate, and outlet.

### Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	3.68	Rating **	U	Issue No.		647
LM End	3.68	Issue Type +	En	Location *		WS
Category	Suppleme	ental		GPS Latitude/Longitud		
Calegory				Start		End
Item	DWR UCI	P Field Study		39.25580	3°	39.255803 °
пеш				-122.00968	3°	-122.009683 °
DWR ID						·

Action/Comments

Inspector Comments: FS\_ID:44600

DS\_ID:16436 EP\_NO: 4213 FS\_HLM: 3.763 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Sink hole over pipe alignment on LS up against the concrete building. Need to dig up pipe and see if its leaking.Recommend adding door to LS concrete structure. Riser located on landward side is damaged. This crossing was listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0194 no issues logged.7/18/2013

Same as last inspection.12/17/2013 Same as last

inspection.6/18/2014 Same as last inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch pipe through the levee. Gate valve on waterward shoulder. 1-1/4 inch conduit through the levee. Siphon breaker on the landward shoulder. Concrete pump house. (Permit No. 4213-1973, Scott Ranch)

FS Date: 04/21/2015



Siphon breaker and section of exposed pipe located on landward shoulder.

#### **Levee Inspection Report By Mile - Fall 2015**

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	3.68	Rating **	U	Issue No.		647 (cont)	
LM End	3.68	Issue Type +	En	Location *		WS	
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.25580	)3 °	39.255803 °	
item				-122.00968	33 °	-122.009683 °	
DWR ID							

Action/Comments

Inspector Comments: FS\_ID:44600

DS\_ID:16436 EP\_NO: 4213 FS\_HLM: 3.763 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Sink hole over pipe alignment on LS up against the concrete building. Need to dig up pipe and see if its leaking.Recommend adding door to LS concrete structure. Riser located on landward side is damaged. This crossing was listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0194 no issues logged.7/18/2013

Same as last inspection.12/17/2013 Same as last

inspection.6/18/2014 Same as last inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch pipe through the levee. Gate valve on waterward shoulder. 1-1/4 inch conduit through the levee. Siphon breaker on the landward shoulder. Concrete pump house. (Permit No.

4213-1973, Scott Ranch) FS Date: 04/21/2015



Gate valve and exposed section of the pipe located on waterward side.

### Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	3.68	Rating **	U	Issue No.		647 (cont)
LM End	3.68	Issue Type +	En	Location *	Location *	
Category	Supplemental					e/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.25580	3°	39.255803°
пеш				-122.00968	3°	-122.009683 °
DWR ID						

Action/Comments

Inspector Comments: FS\_ID:44600

DS\_ID:16436 EP\_NO: 4213 FS\_HLM: 3.763 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Sink hole over pipe alignment on LS up against the concrete building. Need to dig up pipe and see if its leaking.Recommend adding door to LS concrete structure. Riser located on landward side is damaged. This crossing was listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0194 no issues logged.7/18/2013

Same as last inspection.12/17/2013 Same as last

inspection.6/18/2014 Same as last inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch pipe through the levee. Gate valve on waterward shoulder. 1-1/4 inch conduit through the levee. Siphon breaker on the landward shoulder. Concrete pump house. (Permit No. 4213-1973, Scott Ranch)

FS Date: 04/21/2015



Overview of levee crown looking upstream at crossing.

### Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	3.71	Rating **	М	Issue No.		648
LM End	3.71	Issue Type +	En	Location *		WS
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UCI	P Field Study		39.25618	9 °	39.256189 °
item				-122.00995	57 °	-122.009957 °
DWR ID						

Action/Comments

Inspector Comments: FS\_ID:44603

DS\_ID:16424 EP\_NO: 9490 FS\_HLM: 3.794

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Same as last inspection. Crossing needs to be properly abandoned. This crossing was listed in the USACE Periodic Inspection as ID# USACE\_CESPK\_MA1C\_2010\_p\_0194-6 & 7 no issues logged.7/18/2013 Same as last inspection.12/17/2013 Same as last inspection.6/18/2014 Same as last inspection. FIELD\_STRUCT\_DESC: Abandoned 36-inch corrugated metal pipe (CMP) through levee. Concrete distribution box with pump system located on landward side. Slide gate on the waterward slope removed. (ABO No. 9490-1974, Charles T & Virginia W. Yerxa) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 197+19). FS Date: 04/22/2015

LM Start	3.71	Rating **	М	Issue No.	648 (cont)
LM End	3.71	Issue Type +	En	Location *	WS



Debris inside concrete structure located on landward side.



Abandoned pump system inside concrete structure located on landward side.

\*\* Rating

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable M: Not Inspected/Rated C: Corrected M: M: Minimally Acceptable U: Unacceptable U: Unacceptable M: Acceptable M: Acce

### Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	3.71	Rating **	М	Issue No.		Issue No.		648 (cont)
LM End	3.71	Issue Type +	En	Location *		WS		
Supplemental				GPS Latitude/Longitude				
Calegory	tegory					End		
Item	DWR UC	IP Field Study	,	39.2561	89°	39.256189°		
item				-122.0099	57°	-122.009957 °		
DWR ID								
Action/Comments								

Action/Comments

Inspector Comments: FS\_ID:44603

DS\_ID:16424 EP\_NO: 9490 FS\_HLM: 3.794

Repair Type: Non-Urgent Crossing Status: Found



Concrete distribution box located on landward side.

LM Start	3.77	Rating **	U	Issue No.		649	
LM End	3.77	Issue Type +	En	Location *	WS		
Category	Supplemental			GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	DWR UCI	IP Field Study		39.2565	53 °	39.256553 °	
пеш				-122.0109	12 °	-122.010912 °	
DWR ID							

#### Action/Comments

Inspector Comments: FS\_ID:44604

DS ID:16423 EP\_NO: 9489 FS\_HLM: 3.854 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Same as last inspection. Slide gate wheel handle missing. Clear debris from CMP riser. This crossing was listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0196 for access box contains backfilled (permanently shut) and outlet located on landside has sediment build up.7/18/2013 Same as last inspection.12/17/2013 Same as last inspection.6/18/2014 Same as last inspection. FIELD\_STRUCT\_DESC: 36-inch corrugated metal pipe through the levee. Slide gate in CMP riser on the waterward slope. 6 foot by 6 foot concrete box on the waterward berm . Additional 12-inch pipe inside concrete distribution box. (ABO No. 9489-1974, Mayfair Farms Inc.) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 198+00).

FS Date: 04/22/2015



Inside view of CMP riser located on waterward slope.

### Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	3.77	Rating **	U	Issue No.		649 (cont)
LM End	3.77	Issue Type +	En	Location *		WS
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UC	P Field Study		39.25655	53 °	39.256553 °
item				-122.01091	12 °	-122.010912 °
DWR ID						

Action/Comments

Inspector Comments: FS\_ID:44604

DS\_ID:16423 EP\_NO: 9489 FS\_HLM: 3.854 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Same as last inspection.Slide gate wheel handle missing. Clear debris from CMP riser. This crossing was

listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0196 for access box contains backfilled (permanently shut) and outlet located on landside has sediment build up.7/18/2013 Same as last inspection.12/17/2013 Same as last inspection.6/18/2014 Same as last inspection. FIELD\_STRUCT\_DESC: 36-inch corrugated metal pipe through the levee. Slide gate in CMP riser on the waterward slope. 6 foot by 6 foot concrete box on the waterward berm. Additional 12-inch pipe inside concrete distribution box. (ABO No. 9489-1974, Mayfair Farms Inc.) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 198+00).

FS Date: 04/22/2015



View of crossing looking upstream. Concrete box located on the waterward side.

### Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	3.77	Rating **	U	Issue No.		649 (cont)
LM End	3.77	Issue Type +	En	Location *		WS
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UC	P Field Study		39.25655	53 °	39.256553 °
item				-122.01091	12 °	-122.010912 °
DWR ID						

Action/Comments

Inspector Comments: FS\_ID:44604

DS\_ID:16423 EP\_NO: 9489 FS\_HLM: 3.854 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Same as last inspection. Slide gate wheel handle missing. Clear debris from CMP riser. This crossing was

listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0196 for access box contains backfilled (permanently shut) and outlet located on landside has sediment build up.7/18/2013 Same as last inspection.12/17/2013 Same as last inspection.6/18/2014 Same as last inspection. FIELD\_STRUCT\_DESC: 36-inch corrugated metal pipe through the levee. Slide gate in CMP riser on the waterward slope. 6 foot by 6 foot concrete box on the waterward berm . Additional 12-inch pipe inside concrete distribution box. (ABO No. 9489-1974, Mayfair Farms Inc.) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 198+00).

FS Date: 04/22/2015



View of concrete distribution box and CMP riser located on waterward side.

### Levee Inspection Report By Mile - Fall 2015

# **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	3.79	Rating **	М	Issue No.		650	
LM End	3.79	Issue Type +	En	Location *		WS	
Category			GPS Latitude/Longitude				
Calegory				Start		End	
DWR UCIP Field Study		39.2566	06°	39.256606 °			
пеш				-122.0111	15 °	-122.011115 °	
DWR ID							

Action/Comments

Inspector Comments: FS\_ID:44605

DS\_ID:17659 EP\_NO: N/A FS\_HLM: 3.866

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 4/20/2015 Same as last inspection.USA flag markers show some type of alignment on LS. Unable to determine if crossing still exists at this location.7/18/2013 Same as last inspection.12/17/2013 Same as last inspection.6/18/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 18 inch steel pipe through the levee at an unknown depth. Automatic drainage gate on the outlet end of the pipe. This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 150+20). (USACE, 1955)

FS Date: 04/22/2015

LM Start	3.79	Rating **	М	Issue No.	650 (cont)
I M End	3.79	Issue Type +	En	Location *	WS



View of landward side.

Photo 2 of 3 : UCIP\_FA\_2015\_5088.jpg



Marker on landward toe.

# Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	3.79	Rating **	М	Issue No. 65		Issue No. 650 (d		650 (cont)												
LM End	3.79	Issue Type +	En	Location *		Location *		Location *		Location *		Location *		Location *		Location *		Location *		WS
Supplemental			GPS La	atitud	le/Longitude															
Category			Start		End															
Item	DWR UC	P Field Study		39.2566	06 °	39.256606														
item				-122.0111	15 °	-122.011115														
DWR ID																				
Action/Comments																				

Inspector Comments: FS\_ID:44605

DS\_ID:17659 EP\_NO: N/A FS\_HLM: 3.866

Repair Type: Non-Urgent Crossing Status: Indicator Found



Levee crown looking downstream. No appurtances visible on levee crown or slope.

LM Start	3.88	Rating **	М	Issue No.		50	
LM End	3.88	Issue Type +	Ma	Location *		LS	
Category	Earthen L	then Levee GPS Latitude/Longitud					
Category				Start		End	
Item	Vegetation			39.2571	25 °	39.257125 °	
item				-122.012648 °		-122.012648 °	
DWR ID	DWR_MA0	001_01_f _ 201	3_50				
		Action/	Comme	nts			
Elderberrie	es are bloc	king visibility	and flood	d fight capa	bility	<b>'</b> .	

#### Photo 1 of 1: FA\_2015\_MA0001\_297\_50\_20150910\_00015.jpg



View of the elderberry on the landside slope.

## Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	3.95	Rating **	М	Issue No.	651		
LM End	3.95	Issue Type +	En	Location *	LS		
Category	Suppleme	nental GPS Latitude/Longitu		e/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.25807	3°	39.258073	0
пеш				-122.01316	5°	-122.013165	0
DWR ID							

Action/Comments

Inspector Comments: FS\_ID:44606

DS\_ID:16422 EP\_NO: N/A FS\_HLM: 4.035

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Debrs is still blocking gate. Appears to be an abandoned crossing.WS-wheel to operate slide gate missing, walkway has been removed; burrow activity near structure; debris in concrete distribution box WS blocking gate. This crossing was listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0207 the wheel to operate sluice gate missing.7/18/2013 Wheel to operate slide gate has been replaced but gate is still blocked by debris.12/17/2013 Same as last inspection.6/18/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch pipe through the levee. Walkway to slide gate on waterward end. Walkway has been removed. Flap gate in concrete distribution box at the landward toe. (ABO - Wilcox) FS Date: 04/22/2015



View of levee crown looking upstream at crossing.

## Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	3.95	Rating **	М	Issue No.		651 (cont)	
LM End	3.95	Issue Type +	En	Location *		LS	
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.25807	′3 °	39.258073 °	
пеш				-122.01316	65 °	-122.013165 °	
DWR ID							

Action/Comments

Inspector Comments: FS\_ID:44606

DS\_ID:16422 EP\_NO: N/A FS\_HLM: 4.035

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Debrs is still blocking gate. Appears to be an abandoned crossing.WS-wheel to operate slide gate missing, walkway has been removed; burrow activity near structure; debris in concrete distribution box WS blocking gate. This crossing was listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0207 the wheel to operate sluice gate missing.7/18/2013 Wheel to operate slide gate has been replaced but gate is still blocked by debris.12/17/2013 Same as last inspection.6/18/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch pipe through the levee. Walkway to slide gate on waterward end. Walkway has been removed. Flap gate in concrete distribution box at the landward toe. (ABO - Wilcox) FS Date: 04/22/2015



View of slide gate located on waterward side.

## Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	3.95	Rating **	М	Issue No.	651 (cont)		
LM End	3.95	Issue Type +	En	Location *	LS		
Category	Suppleme	ental GPS Latitude/Longitu		e/Longitude			
Category				Start		End	
Item	DWR UCI	IP Field Study		39.25807	3°	39.258073	0
пеш				-122.01316	5°	-122.013165	0
DWR ID							

#### Action/Comments

Inspector Comments: FS\_ID:44606

DS\_ID:16422 EP\_NO: N/A FS\_HLM: 4.035

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Debrs is still blocking gate. Appears to be an abandoned crossing.WS-wheel to operate slide gate missing, walkway has been removed; burrow activity near structure; debris in concrete distribution box WS blocking gate. This crossing was listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0207 the wheel to operate sluice gate missing.7/18/2013 Wheel to operate slide gate has been replaced but gate is still blocked by debris.12/17/2013 Same as last inspection.6/18/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch pipe through the levee. Walkway to slide gate on waterward end. Walkway has been removed. Flap gate in concrete distribution box at the landward toe. (ABO - Wilcox) FS Date: 04/22/2015



View of waterward slope with concrete structure.

## Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	4.65	Rating **	М	Issue No.		652
LM End	4.65	Issue Type +	En	Location *		LS
Category	Supplemental			GPS La	titud	le/Longitude
Calegory	ategory		Start		End	
Item	DWR UCI	P Field Study		39.2664	35 °	39.266435 °
пеш				-122.0109	43 °	-122.010943 °
DWR ID						

Action/Comments

Inspector Comments: FS\_ID:44607

DS\_ID:16421 EP\_NO: 9475 FS\_HLM: 4.749

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Same as last inspection.Burrow activity; limited visibility of this crossing only on WS riser. This crossing was

listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0207 the wheel to operate sluice gate

missing. Issue addressed wheel to slide gate has been

installed.7/18/2013 Same as last inspection.12/17/2013 Same as

last inspection.6/18/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 30-inch corrugated metal pipe through the levee, 16.1 feet below the crown. Slide gate on the waterward end. (ABO No. 9475-1974, Mattie B. Zumwalt Co.) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 247+86).

FS Date: 04/22/2015



Overview of levee crown looking upstream at crossing.

## Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	4.65	Rating **	М	Issue No.		652 (cont)	
LM End	4.65	Issue Type +	En	Location *		LS	
Category	Category Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.26643	85 °	39.266435 °	
пеш				-122.01094	ı3°	-122.010943 °	
DWR ID							

Action/Comments

Inspector Comments: FS\_ID:44607

DS\_ID:16421 EP\_NO: 9475 FS\_HLM: 4.749

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Same as last inspection.Burrow activity; limited visibility of this crossing only on WS riser. This crossing was

listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0207 the wheel to operate sluice gate

missing. Issue addressed wheel to slide gate has been

installed.7/18/2013 Same as last inspection.12/17/2013 Same as

last inspection.6/18/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 30-inch corrugated metal pipe through the levee, 16.1 feet below the crown. Slide gate on the waterward end. (ABO No. 9475-1974, Mattie B. Zumwalt Co.) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 247+86).

FS Date: 04/22/2015



Woody debris inside riser blocking gate.

## Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	4.65	Rating **	М	Issue No.		652 (cont)	
LM End	4.65	Issue Type +	En	Location *		LS	
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.2664	35 °	39.266435	٥
item				-122.0109	43 °	-122.010943	0
DWR ID							

#### Action/Comments

Inspector Comments: FS\_ID:44607

DS\_ID:16421 EP\_NO: 9475 FS\_HLM: 4.749

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Same as last inspection.Burrow activity; limited visibility of this crossing only on WS riser. This crossing was

listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0207 the wheel to operate sluice gate

missing. Issue addressed wheel to slide gate has been

installed.7/18/2013 Same as last inspection.12/17/2013 Same as

last inspection.6/18/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 30-inch corrugated metal pipe through the levee, 16.1 feet below the crown. Slide gate on the waterward end. (ABO No. 9475-1974, Mattie B. Zumwalt Co.) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 247+86).

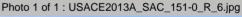
FS Date: 04/22/2015



Riser with slide gate located on waterward toe.

LM Start	4.86	Rating **	М	Issue No.		3	
LM End	5.26	Issue Type +	Ma	Location *	WS		
Category	ental	GPS Latitude/Longitude					
Category				Start		End	
Item		CE Erosion S	Survey,	39.26573	o°	39.266315 °	
пеш	DRAFT			-122.01492	5°	-122.020682 °	
DWR ID							
	Action/Comments						

Inspector Comments: 2009 - Slump in the middle of the section has left a vertical section on the bank. 2010 - Old cobble site unraveling, site extended downstream. 2015: Last observed in 2013. [2015 Site ID: SAC\_151-0\_R]





USACE 2013 Photo #1

## Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	4.97	Rating **	М	Issue No.		653
LM End	4.97	Issue Type +	En	Location *		WS
Category Supplemental				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		39.2649	24 °	39.264924 °
пеш				-122.0158	87 °	-122.015887 °
DWR ID						

Action/Comments

Inspector Comments: FS\_ID:44608

DS\_ID:16420 EP\_NO: 4903 FS\_HLM: 5.075

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Suspect that pump on LS is a well pump and has nothing to do with this crossing. Unable to locate siphon breaker, pump on LS; unable to tell if pump system is part of appurtances. This crossing was listed in the USACE Periodic Inspection as ID# USACE\_CESPK\_MA1C\_2010\_p\_0233 for utility pole and 8 inch steel riser located on landward toe. 7/18/2013 Same as last inspection. 12/17/2013 Same as last inspection. 6/18/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 12-inch irrigation pipe through the levee. Siphon breaker in 24-inch CMP riser on the landward shoulder. 3-inch electrical conduit through the levee. (Permit No. 4903,A-1966, Zumwalt) FS Date: 04/22/2015

LM Start	4.97	Rating **	М	Issue No.	653 (cont)
LM End	4.97	Issue Type +	En	Location *	WS



View of levee crown looking downstream at crossing.

Photo 2 of 3: UCIP\_FA\_2015\_5135.jpg



View of waterward side-no visible appurtances associated with structure.

\*Location
LS: Land Side N/A: Not Applicable
WS: Water Side CR: Crown

\*\* Rating
A: Acceptable
N: Not Inspected/Rated
C: Corrected
N: Not Inspected/Rated
C: Corrected
C: Corrected
AW: Acceptable but Monitor & Maintain

\*\* Rating
A: Asceptable
N: Not Inspected/Rated
C: Corrected
Ob: Design & System Obsolescence
En: Enforcement

## Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	4.97	Rating **	М	Issue No. 653 (cont)		
LM End	4.97	Issue Type +	En	Location *	WS	
Category	ental		GPS La	titud	le/Longitude	
Calegory	ly :					End
Item	DWR UC	P Field Study		39.26492	24 °	39.264924 °
item				-122.01588	37 °	-122.015887 °
DWR ID						
Action/Comments						

Inspector Comments: FS\_ID:44608

DS\_ID:16420 EP\_NO: 4903 FS\_HLM: 5.075

Repair Type: Non-Urgent Crossing Status: Found



View of levee crown looking upstream at crossing.

LM Start	5.72	Rating **	М	Issue No.		654	
LM End	5.72	Issue Type +	En	Location *		WS	
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.2720	69 °	39.272069	0
пеш				-122.0232	40 °	-122.023240	0
DWR ID							

#### Action/Comments

Inspector Comments: FS\_ID:44624

DS ID:17569 EP\_NO: 9476 FS\_HLM: 5.844

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 WS entry still blocked and wingwalls still cracked.blocked, no entry on WS. This crossing was listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0247 for u/s and d/s wing wall shows some cracking and tilting.7/18/2013 Same as last

inspection.12/17/2013 Same as last inspection.6/18/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 2 of 2: 36-inch corrugated metal pipe (15 feet long) and concrete box culvert through the levee. Slide gate located on waterward. (ABO No. 9476-1974, Howard C. & Nadine M. Ohliger) FS Date: 04/22/2015



Headwall and slide gate located on waterward side.

## Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	5.72	Rating **	М	Issue No.		654 (cont)
LM End	5.72	Issue Type +	En	Location *		WS
Category				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	IP Field Study		39.27206	9°	39.272069
пеш				-122.02324	10°	-122.023240
DWR ID						

Action/Comments

Inspector Comments: FS\_ID:44624

DS\_ID:17569 EP\_NO: 9476 FS\_HLM: 5.844

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 WS entry still blocked and wingwalls still cracked.blocked, no entry on WS. This crossing was listed in the

USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0247 for u/s and d/s wing wall shows

some cracking and tilting.7/18/2013 Same as last

inspection.12/17/2013 Same as last inspection.6/18/2014 Same as

last inspection.

FIELD\_STRUCT\_DESC: 2 of 2: 36-inch corrugated metal pipe (15 feet long) and concrete box culvert through the levee. Slide gate located on waterward. (ABO No. 9476-1974, Howard C. & Nadine M. Ohliger) FS Date: 04/22/2015

LM Start	5.72	Rating **	М	Issue No.	654 (cont)
LM End	5.72	Issue Type +	En	Location *	WS



View of levee crown looking upstream at crossing.

Photo 3 of 3: UCIP\_FA\_2015\_5253.jpg



View of levee crown looking downstream at crossing.

# Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	5.72	Rating **	М	Issue No.	655	
LM End	5.72	Issue Type +	En	Location *		WS
Category	Supplemental			GPS Lat	itud	e/Longitude
Calegory			Start		End	
Item	DWR UC	P Field Study		39.27206	9 °	39.272069 °
item				-122.02324	o °	-122.023240 °
DWR ID						
Action/Comments						

Action/Comm

Inspector Comments: FS\_ID:44623

DS\_ID:16419 EP\_NO: 9476 FS\_HLM: 5.842

Repair Type: Non-Urgent Crossing Status: Found

LM Start	5.72	Rating **	М	Issue No.	655 (cont)
LM End	5.72	Issue Type +	En	Location *	WS



View of crossing looking upstream at crossing.

Photo 2 of 3: UCIP\_FA\_2015\_5249.jpg



Overview of levee crown looking downstream at crossing.

# Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	5.72	Rating **	М	Issue No.		655 (cont)	
LM End	5.72	Issue Type +	En	Location *		WS	
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.2720	69°	39.272069	0
item				-122.02324	40 °	-122.023240	0
DWR ID							

Action/Comments

Inspector Comments: FS\_ID:44623

DS\_ID:16419 EP\_NO: 9476 FS\_HLM: 5.842

Repair Type: Non-Urgent Crossing Status: Found



View of waterward slope and access road. Slide gate is second crossing at this location.

LM Start	5.77	Rating **	М	Issue No.	35		
LM End	5.77	Issue Type +	Ma	Location *	LS		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start	End		
Item	Vegetatio	n		39.2727	73 °	39.272773	٥
пеш				-122.0232	90°	-122.023290	٥
DWR ID	DWR_MA0	01_01_s _ 2012_35					
	Action/Comments						

Elderberries are blocking visibility and flood fight capability.

No Photos

LM Start	5.82	Rating **	Α	Issue No.	80		
LM End	5.82	Issue Type +	Ma	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory	Category			Start		End	
Item	Vegetatio	n		39.27345	5 °	39.273455	0
пеш			-122.02332	3°	-122.023323	0	
DWR ID	DWR_MA0	001_01_f _ 201	5_80				
		A ation/	Commo	nto			

Control annual grass and weeds on the levee slopes and easements. Inspector Comments: Sutter Yard burn and dragged both slopes.



View of no vegetation on both slopes.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2015

# **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

	0.40	Dating **		Issue No.		
LM Start	6.12	Rating **	М	issue No.		75
LM End	6.12	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Encroachi	Encroachments			33 °	39.277733 °
iteiii				-122.0228	87 °	-122.022887 °
DWR ID	DWR_MA0	001_01_f _ 201	5_75			
		Action/	Comme	nts		
Prunings						



View of the prunings along the landside toe.

LM Start	6.20	Rating **	М	Issue No.		76
LM End	6.20	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Category			Start		End	
Item	Encroach	Encroachments			17 °	39.278917 °
item				-122.022595 °		-122.022595 °
DWR ID	DWR_MA0	001_01_s _ 201	14_76			
		Action/	Comme	nts		
Prunings						



View of the prunings along the landside toe.

## Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	6.24	Rating **	U	Issue No.		656			
LM End	6.24	Issue Type +	En	Location *		LS			
Catagony	Supplemental				GPS Latitude/Longitude				
Calegory	Category					End			
Item	DWR UCI	P Field Study		39.2794	62 °	39.279462 °			
пеш			-122.0224	61 °	-122.022461 °				
DWR ID									

Action/Comments

Inspector Comments: FS\_ID:44628

DS\_ID:16446 EP\_NO: 4203 FS\_HLM: 6.374 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 5inch pvc is still present blocking slide gate from closing. WS end of pipe has been exposed so there is no way to stop water from flowing through pipe during highwater times. Unauthorized 5 inch PVC pipe running through 36 inch crossing. 5 inch PVC crossing prevents slide gate from closing during high water. Debris and sediment inside riser. This crossing was listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0258 for 5 inch PVC pipe running through culvert.7/18/2013 Same as last inspection.12/17/2013 Same as last inspection.6/23/2014 Same as last inspection. There is no way to stop water from flowing though pipe during high water times. FIELD\_STRUCT\_DESC: 36-inch pipe through the levee. Slide gate in CMP riser on the waterward slope. This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 331+31). FS Date: 04/22/2015

Photo 1 of 3: UCIP\_FA\_2015\_5254.jpg

Overview of levee crown looking downstream at crossing.

## Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	6.24	Rating **	U	Issue No.		656 (cont)			
LM End	6.24	Issue Type +	En	Location *		LS			
Category	Supplemental				GPS Latitude/Longitude				
Calegory			Start		End				
Item	DWR UCI	P Field Study		39.27946	62 °	39.279462 °			
item				-122.02246	61 °	-122.022461 °			
DWR ID									

Action/Comments

Inspector Comments: FS\_ID:44628

DS\_ID:16446 EP\_NO: 4203 FS\_HLM: 6.374 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 5inch pvc is still present blocking slide gate from closing. WS end of pipe has been exposed so there is no way to stop water from flowing through pipe during highwater times.Unauthorized 5 inch PVC pipe running through 36 inch crossing. 5 inch PVC crossing prevents slide gate from closing during high water. Debris and sediment inside riser. This crossing was listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0258 for 5 inch PVC pipe running through culvert.7/18/2013 Same as last inspection.12/17/2013 Same as last inspection.6/23/2014 Same as last inspection. There is no way to stop water from flowing though pipe during high water times. FIELD\_STRUCT\_DESC: 36-inch pipe through the levee. Slide gate in CMP riser on the waterward slope. This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 331+31). FS Date: 04/22/2015



Inside view of CMP riser, 5-inch pipe through 36-inch drainage pipe.

## Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	6.24	Rating **	U	Issue No.		656 (cont)			
LM End	6.24	Issue Type +	En	Location *		LS			
Category	Supplemental				GPS Latitude/Longitude				
Calegory	ory			Start		End			
Item	DWR UCI	P Field Study		39.2794	62 °	39.279462	0		
item			-122.0224	61 °	-122.022461	0			
DWR ID									

#### Action/Comments

Inspector Comments: FS\_ID:44628

DS\_ID:16446 EP\_NO: 4203 FS\_HLM: 6.374 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 5inch pvc is still present blocking slide gate from closing. WS end of pipe has been exposed so there is no way to stop water from flowing through pipe during highwater times. Unauthorized 5 inch PVC pipe running through 36 inch crossing. 5 inch PVC crossing prevents slide gate from closing during high water. Debris and sediment inside riser. This crossing was listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0258 for 5 inch PVC pipe running through culvert.7/18/2013 Same as last inspection.12/17/2013 Same as last inspection.6/23/2014 Same as last inspection. There is no way to stop water from flowing though pipe during high water times. FIELD\_STRUCT\_DESC: 36-inch pipe through the levee. Slide gate in CMP riser on the waterward slope. This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 331+31). FS Date: 04/22/2015



CMP riser located on waterward slope.

LM Start	6.37	Rating **	М	Issue No.		77		
LM End	6.37	Issue Type +	En	Location *		LS		
Category	Category Earthen Levee			GPS Latitude/Longitude				
Category	Start					End		
Item	Encroachments			39.2813	64°	39.281364 °		
item				-122.0220	38°	-122.022038 °		
DWR ID	DWR_MA0	001_01_s _ 201	14_77					
Action/Comments								
Prunings								



View of the prunings along the landside toe.

\*Location

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

\*\* Rating

A : Acceptable
N : Not Inspected/Rated
M : Maintenance Deficiancy
Ob : Design & System Obsolescence
U : Unacceptable
A/W : Acceptable but Monitor & Maintain
En : Enforcement

## Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	6.40	Rating **	М	Issue No.		657		
LM End	6.40	Issue Type +	En	Location *		LS		
Category Supplemental				GPS Latitude/Longitude				
Calegory			Start		End			
Item	DWR UCI	P Field Study		39.28172	21 °	39.281721 °		
пеш				-122.02189	94 °	-122.021894°		
DWR ID								

Action/Comments

Inspector Comments: FS\_ID:44632

DS\_ID:16425 EP\_NO: N/A FS\_HLM: 6.537

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Same as last inspection.Need to be properly abandoned concrete structure; plate covers concrete box; Concrete headwall damaged. This crossing was listed in the USACE Periodic Inspection as ID# USACE\_CESPK\_MA1C\_2010\_p\_0262 for damage to concrete structure (vertical 2 inch wide cracks and spalling visible).7/18/2013 Same as last inspection.12/17/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: Abandoned 72-inch corrugated metal drain (precast concrete) pipe through the levee, blocked on waterward end with 3-foot concrete plug installed in 1980. Slide gate in concrete well on the landward shoulder. Concrete headwall at both toes. This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 339+74)

FS Date: 04/22/2015



View of structure located in landward side.

#### **Levee Inspection Report By Mile - Fall 2015**

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	6.40	Rating **	М	Issue No.		657 (cont)			
LM End	6.40	Issue Type +	En	Location *		LS			
Category	Supplemental				GPS Latitude/Longitude				
Calegory			Start		End				
Item	DWR UCI	P Field Study		39.2817	21 °	39.281721 °			
пеш			-122.0218	94 °	-122.021894 °				
DWR ID									

Action/Comments

Inspector Comments: FS\_ID:44632

DS\_ID:16425 EP\_NO: N/A FS\_HLM: 6.537

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Same as last inspection.Need to be properly abandoned concrete structure; plate covers concrete box; Concrete headwall damaged. This crossing was listed in the USACE Periodic Inspection as ID# USACE\_CESPK\_MA1C\_2010\_p\_0262 for damage to concrete structure (vertical 2 inch wide cracks and spalling visible).7/18/2013 Same as last inspection.12/17/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: Abandoned 72-inch corrugated metal drain (precast concrete) pipe through the levee, blocked on waterward end with 3-foot concrete plug installed in 1980. Slide gate in concrete well on the landward shoulder. Concrete headwall at both toes. This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 339+74)

FS Date: 04/22/2015



Overview of levee crown looking downstream at crossing.

## Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	6.40	Rating **	М	Issue No.		657 (cont)	
LM End	6.40	Issue Type +	En	Location *	LS		
Category Supplemental			GPS Latitude/Longitude				
Calegory	У			Start		End	
Item	DWR UCI	IP Field Study		39.28172	1°	39.281721 °	
пеш				-122.021894°		-122.021894°	
DWR ID						·	

Action/Comments

Inspector Comments: FS\_ID:44632

DS\_ID:16425 EP\_NO: N/A FS\_HLM: 6.537

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Same as last inspection. Need to be properly abandoned concrete structure; plate covers concrete box; Concrete headwall damaged. This crossing was listed in the USACE Periodic Inspection as ID# USACE\_CESPK\_MA1C\_2010\_p\_0262 for damage to concrete structure (vertical 2 inch wide cracks and spalling visible).7/18/2013 Same as last inspection.12/17/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: Abandoned 72-inch corrugated metal drain (precast concrete) pipe through the levee, blocked on waterward end with 3-foot concrete plug installed in 1980. Slide gate in concrete well on the landward shoulder. Concrete headwall at both toes. This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 339+74)

FS Date: 04/22/2015



View of waterward side no structure features visable.

## Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	6.99	Rating **	U	Issue No.		658		
LM End	6.99	Issue Type +	En	Location *	LS			
Supplemental Supplemental				GPS Latitude/Longitude				
Calegory	Category					End		
Item	DWR UCI	IP Field Study		39.29014	17 °	39.290147 °		
пеш				-122.02152	25 °	-122.021525 °		
DWR ID						·		

#### Action/Comments

Inspector Comments: FS\_ID:44644

DS\_ID:16427 EP\_NO: 9482 FS\_HLM: 7.14 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Same as last inspection. Structure is still buried. Structure is buried and non-operational. This crossing was

listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0288 for sluice gate closed and backfilled on WS and full of sediment with wingwall cracked on LS.7/18/2013 Same as last inspection.12/17/2013 Same as last inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 1 of 2: 36-inch concrete pipes through the levee. Wooden slide gates on waterward end. Concrete culvert through levee. Sliding metal gate noted in O&M manual. This entry could match the Drainage or Irrigation Structure referenced in the O&M manual (Station 370+90) (USACE-1955)(ABO No. 9482-1974, Elizabeth M. Farnsworth).

FS Date: 04/22/2015



delete

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	6.99	Rating **	U	Issue No.		658 (cont)	
LM End	6.99	Issue Type +	En	Location *		LS	
Category	Supplemental			GPS Latitude/Longitude			
Calegory			Start		End		
Itom	DWR UCI	P Field Study		39.29014	17°	39.290147 °	
Item				-122.02152	25 °	-122.021525 °	
DWR ID						·	

Action/Comments

Inspector Comments: FS\_ID:44644

DS\_ID:16427 EP\_NO: 9482 FS\_HLM: 7.14 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Same as last inspection. Structure is still buried. Structure is buried and non-operational. This crossing was

listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0288 for sluice gate closed and backfilled on WS and full of sediment with wingwall cracked on LS.7/18/2013 Same as last inspection.12/17/2013 Same as last inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 1 of 2: 36-inch concrete pipes through the levee. Wooden slide gates on waterward end. Concrete culvert through levee. Sliding metal gate noted in O&M manual. This entry could match the Drainage or Irrigation Structure referenced in the O&M manual (Station 370+90) (USACE-1955)(ABO No. 9482-1974, Elizabeth M. Farnsworth).

FS Date: 04/22/2015



Overview of levee crown looking downstream at crossing.

## Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	6.99	Rating **	U	Issue No.	(	658 (cont)
LM End	6.99	Issue Type +	En	Location *	LS	
Category			GPS Latitude/Longitude			
Calegory	ory			Start		End
Item	DWR UC	IP Field Study		39.2901	47 °	39.290147 °
пеш				-122.021525 °		-122.021525 °
DWR ID						·

Action/Comments

Inspector Comments: FS\_ID:44644

DS\_ID:16427 EP\_NO: 9482 FS\_HLM: 7.14 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Same as last inspection. Structure is still buried. Structure is buried and non-operational. This crossing was

listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0288 for sluice gate closed and backfilled on WS and full of sediment with wingwall cracked on LS.7/18/2013 Same as last inspection.12/17/2013 Same as last inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 1 of 2: 36-inch concrete pipes through the levee. Wooden slide gates on waterward end. Concrete culvert through levee. Sliding metal gate noted in O&M manual. This entry could match the Drainage or Irrigation Structure referenced in the O&M manual (Station 370+90) (USACE-1955)(ABO No. 9482-1974, Elizabeth M. Farnsworth).

FS Date: 04/22/2015



View of crossing from waterward side. Waterward side blocked by sediment. 2 slide gates part of structure design.

## Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	6.99	Rating **	М	Issue No.		659	
LM End	6.99	Issue Type +	En	Location *	LS		
Catagony	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.29016	9°	39.290169°	
пеш	Í			-122.02153	32 °	-122.021532 °	
DWR ID							

Action/Comments

Inspector Comments: FS\_ID:44645

DS\_ID:17570 EP\_NO: 9482 FS\_HLM: 7.142

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Structure is operational. WS slide gate was unbrried aloowing water to irrigate the fields. It gets reburried during highwater season. Structure is buried and non-operational. This crossing was listed in the USACE Periodic Inspection as ID# USACE\_CESPK\_MA1C\_2010\_p\_0288 for sluice gate closed and backfilled on WS and full of sediment with wingwall cracked on LS.7/18/2013 WS screw gate has been cleared of dirt and is open to irrigate LS fields. LS outlet is still mostly blocked by sediment.12/17/2013 WS screw gate was closed and buried by soil again6/23/2014 Same as last inspection. Soli dug out again and water flowing through crossing.

FIELD\_STRUCT\_DESC: 2 of 2: 36-inch concrete pipes through the levee. Wooden slide gates on waterward end. Concrete culvert through levee. Sliding metal gate noted in O&M manual. This entry could match the Drainage or Irrigation Structure referenced in the O&M manual (Station 370+90) (USACE-1955). (ABO No. 9482-1974, Elizabeth M. Farnsworth)

FS Date: 04/22/2015



delete

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	6.99	Rating **	М	Issue No.		659 (cont)	
LM End	6.99	Issue Type +	En	Location *		LS	
Category				GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UCI	P Field Study		39.29016	9°	39.290169°	
item				-122.02153	2 °	-122.021532 °	
DWR ID							

Action/Comments

Inspector Comments: FS\_ID:44645 DS\_ID:17570

DS\_ID:17570 EP\_NO: 9482 FS\_HLM: 7.142

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Structure is operational. WS slide gate was unbrried aloowing water to irrigate the fields. It gets reburried during highwater season. Structure is buried and non-operational. This crossing was listed in the USACE Periodic Inspection as ID# USACE\_CESPK\_MA1C\_2010\_p\_0288 for sluice gate closed and backfilled on WS and full of sediment with wingwall cracked on LS.7/18/2013 WS screw gate has been cleared of dirt and is open to irrigate LS fields. LS outlet is still mostly blocked by sediment.12/17/2013 WS screw gate was closed and buried by soil again6/23/2014 Same as last inspection. Soli dug out again and water flowing through crossing.

FIELD\_STRUCT\_DESC: 2 of 2: 36-inch concrete pipes through the levee. Wooden slide gates on waterward end. Concrete culvert through levee. Sliding metal gate noted in O&M manual. This entry could match the Drainage or Irrigation Structure referenced in the O&M manual (Station 370+90) (USACE-1955). (ABO No. 9482-1974, Elizabeth M. Farnsworth)

FS Date: 04/22/2015



Overview of levee crown looking downstream at crossing.

# Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	6.99	Rating **	М	Issue No.		659 (cont)
LM End	6.99	Issue Type +	En	Location *		LS
Supplemental Supplemental				GPS Latitude/Longitude		
Calegory	ategory			Start		End
Item	DWR UCI	P Field Study		39.29016	9°	39.290169°
пеш				-122.02153	32 °	-122.021532 °
DWR ID					·	

Action/Comments

Inspector Comments: FS\_ID:44645

DS\_ID:17570 EP\_NO: 9482 FS\_HLM: 7.142

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Structure is operational. WS slide gate was unbrried allowing water to irrigate the fields. It gets reburried during highwater season. Structure is buried and non-operational. This crossing was listed in the USACE Periodic Inspection as ID# USACE\_CESPK\_MA1C\_2010\_p\_0288 for sluice gate closed and backfilled on WS and full of sediment with wingwall cracked on LS.7/18/2013 WS screw gate has been cleared of dirt and is open to irrigate LS fields. LS outlet is still mostly blocked by sediment.12/17/2013 WS screw gate was closed and buried by soil again6/23/2014 Same as last inspection. Soli dug out again and water flowing through crossing.

FIELD\_STRUCT\_DESC: 2 of 2: 36-inch concrete pipes through the levee. Wooden slide gates on waterward end. Concrete culvert through levee. Sliding metal gate noted in O&M manual. This entry could match the Drainage or Irrigation Structure referenced in the O&M manual (Station 370+90) (USACE-1955). (ABO No. 9482-1974, Elizabeth M.

Farnsworth) FS Date: 04/22/2015 Photo 3 of 3: UCIP\_FA\_2015\_6298.jpg



View of crossing from waterward side. Waterward side blocked by sediment. 2 slide gates part of structure design.

## Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	7.27	Rating **	М	Issue No.		660
LM End	7.27	Issue Type +	En	Location *		LS
Category Supplemental			GPS Latitude/Longitude			
Calegory				Start		End
Item	DWR UCI	P Field Study		39.2940	74 °	39.294074 °
пеш				-122.0214	35 °	-122.021435 °
DWR ID						

Action/Comments

Inspector Comments: FS\_ID:44646

DS\_ID:16456 EP\_NO: N/A FS\_HLM: 7.421

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Same as last inspection. Rebar pin was still inplace holding the gate opened. Sediment and debris on wateward and landward side. This crossing was listed in the USACE Periodic Inspection as ID# USACE\_CESPK\_MA1C\_2010\_p\_0293 for wooden slide gate held open by a piece of rebar acting as a pin.7/18/2013 Same as last inspection. 12/17/2013 Same as last inspection. 6/23/2014 Same as last inspection.

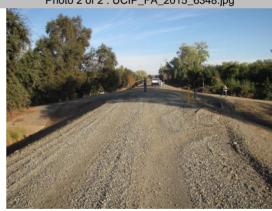
FIELD\_STRUCT\_DESC: 5 foot by 6 foot concrete box culvert through the levee and access ramp. Two wooden slide gates on waterward end. Concrete v-ditch along landward toe. This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 385+33.5). FS Date: 04/22/2015

LM Start	7.27	Rating **	М	Issue No.	660 (cont)
LM End	7.27	Issue Type +	En	Location *	LS



Overview of levee crown looking downstream at crossing.

Photo 2 of 2: UCIP\_FA\_2015\_6348.jpg



Overview of levee crown looking upstream at crossing.

## Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	7.51	Rating **	A/W	Issue No.		24	
LM End	7.80	Issue Type +	Ob	Location *		WS	
Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Vegetation			39.297533 °		39.297420	0
пеш				-122.0217	79°	-122.027010	0
DWR ID	DWR ID DWR_MA0001_01_s _ 2012_24						
Action/Comments							
Environmental Requirements.							

No Photos

LM Start	7.58	Rating **	М	Issue No.		661
LM End	7.58	Issue Type +	ue Type + En Location *			WS
Catagony	Suppleme	ental		GPS La	atitud	le/Longitude
Category				Start		End
Item	DWR UCI	P Field Study		39.2973	84 °	39.297384 °
iteiii				-122.0229	89 °	-122.022989 °
DWR ID						

#### Action/Comments

Inspector Comments: FS\_ID:44647

DS ID:16455 EP\_NO: 12334 FS\_HLM: 7.743 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Same as last inspection. Siphon breaker housing unit is bent and has debris inside. LS outlet not

found.7/18/2013 Same as last inspection.12/17/2013 Same as last

inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 10-inch steel pipe through levee, 3 feet below the crown. Centrifugal pump on the bank. Siphon breaker on landward shoulder of the levee. (Permit No. 12334-1978, James Jean)

FS Date: 04/22/2015



View of waterward side-no features on levee shoulder or slope.

## Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	7.58	Rating **	М	Issue No.		661 (cont)	
LM End	7.58	Issue Type +	En	Location *		WS	
Category			GPS Latitude/Longitude				
Calegory	legory			Start		End	
Item	DWR UCI	P Field Study		39.29738	4 °	39.297384	۰
пеш	item			-122.02298	9 °	-122.022989	0
DWR ID						·	

Action/Comments

Inspector Comments: FS\_ID:44647

DS\_ID:16455 EP\_NO: 12334 FS\_HLM: 7.743

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Same as last inspection. Siphon breaker

housing unit is bent and has debris inside. LS outlet not

found.7/18/2013 Same as last inspection.12/17/2013 Same as last

inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 10-inch steel pipe through levee, 3 feet below the crown. Centrifugal pump on the bank. Siphon breaker on landward shoulder of the levee. (Permit No. 12334-1978, James Jean)

FS Date: 04/22/2015

LM Start	7.58	Rating **	М	Issue No.	661 (cont)
LM End	7.58	Issue Type +	Fn	Location *	WS



Pump located on waterward bank.

Photo 3 of 3: UCIP\_FA\_2015\_6351.jpg



View of landward side with appurtances present on levee shoulder.

# **Levee Inspection Report By Mile - Fall 2015**

# **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	7.70	Rating **	М	Issue No.		52	
LM End	7.70	Issue Type +	Ма	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory						End	
Item	Vegetatio	Vegetation			03 °	39.297303 °	
пеш				-122.025257 °		-122.025257 °	
DWR ID	DWR_MA0	001_01_s _ 201	12_52				
		Action/	Comme	nts			
Elderberries are blocking visibility and flood fight capability.							

No Photos

LM Start	8.73	Rating **	М	Issue No.		25	
LM End	9.19	Issue Type +	En	Location *	LS		
Category	Earthen Levee			GPS Lat	itud	le/Longitude	
Calegory				Start		End	
Item	Encroachments			39.30839	0 °	39.315125 °	
пеш				-122.03115	7 °	-122.030206 °	
DWR ID	DWR_MA0	001_01_s _ 201	12_25				
Action/Comments							
Ditch							

# Photo 1 of 1 : FA\_2015\_MA0001\_297\_25\_20150910\_00010.jpg

View of the ag. ditch along the L/S toe.

## Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	8.92	Rating **	М	Issue No.		662
LM End	8.92	Issue Type +	En	Location *		LS
Category Supplemental GPS L			Supplemental			le/Longitude
Calegory				Start		End
Item	DWR UCI	DWR UCIP Field Study			)3 °	39.311103 °
item				-122.03054	11 °	-122.030541 °
DWR ID						

Action/Comments

Inspector Comments: FS\_ID:44648

DS\_ID:16454 EP\_NO: 9466 FS\_HLM: 9.11

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Same as last inspection. No access to inspect slide gate on LS. Roof of pumping house deteriorating and debris scattered on landward side. WS crossing not found. This crossing was listed in the USACE Periodic Inspection as ID# USACE\_CESPK\_MA1C\_2010\_p\_345 no issues recorded.7/18/2013 Same as last inspection.12/17/2013 Same as last

inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch steel pipe through the levee. Slide gate in concrete riser on the landward slope. Pump house encroaches into the landward slope. Two service poles on the landward shoulder. (ABO No. 9466-1974, Roman Catholic Bishop of Sacramento)

FS Date: 04/22/2015

LM Start	8.92	Rating **	М	Issue No.	662 (cont)
LM End	8.92	Issue Type +	En	Location *	LS



Overview of levee crown looking upstream at crossing.



View of pump and standpipe located on landward side.

Location + Issue Type A : Acceptable M : Minima LS : Land Side Ma : Maintenance Deficiancy N/A: Not Applicable N: Not Inspected/Rated WS: Water Side Minimally Acceptable C : Corrected Ob: Design & System Obsolescence CR : Crown U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

## Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	8.92	Rating **	М	Issue No.		662 (cont)	
LM End	8.92	Issue Type +	En	Location *		LS	
Category	Suppleme	ental		GPS La	titud	le/Longitude	
Calegory				Start		End	
Item	DWR UCI	DWR UCIP Field Study			)3 °	39.311103°	
пеш				-122.03054	41 °	-122.030541 °	
DWR ID							
		Action/	Comme	nts			
Inspector (	Comments	: FS_ID:4464	8				
DS_ID:164	154						
EP_NO: 9466							
FS_HLM: 9.11							
Repair Type: Non-Urgent							
Crossing Status: Found							



Overview of levee crown looking downstream at crossing.

LM Start	10.09	Rating **	М	Issue No.		663
LM End	10.09	Issue Type +	En	Location *		LS
Category Supplemental GPS Latitude/Long				de/Longitude		
Calegory		Start		End		
Item	DWR UCIP Field Study			39.3281	21 °	39.328121 °
iteiii				-122.0292	62 °	-122.029262 °
DWR ID						

Action/Comments

Inspector Comments: FS\_ID:44650

DS\_ID:17655
EP\_NO: N/A
FS\_HLM: 10.313
Repair Type: Non-Urgent
Crossing Status: Not Found

UCIP Comments: 4/20/2015 Unable to locate.7/18/2013 Same as

last inspection. Unable to locate.12/17/2013 Unable to

locate.6/23/2014 Unable to locate.

FIELD\_STRUCT\_DESC: 36 inch corrugated metal pipe through the levee at an unknown depth. Slide gate on the outlet end of the pipe. This entry matches the Drainage and Irrigation Structure referenced in

O&M manual (Station 538+42). (USACE, 1955)

FS Date: 04/22/2015

No Photos

## Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	10.09	Rating **	М	Issue No.		664
LM End	10.09	Issue Type +	En	Location *		LS
Category			Supplemental			le/Longitude
Calegory						End
Item	DWR UCI	P Field Study		39.32812	1°	39.328121 °
item		-122.02926	2 °	-122.029262 °		
DWR ID						

Action/Comments

Inspector Comments: FS\_ID:44649

DS\_ID:17656 EP\_NO: N/A FS\_HLM: 10.313 Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: 4/20/2015 Unable to locate.7/18/2013 Same as last inspection. Unable to locate.6/23/2014 Unable to locate. FIELD\_STRUCT\_DESC: 24 inch steel pipe through the levee at an unknown depth. Automatic drainage gate on the outlet end of the pipe. This entry matches the Drainage and Irrigation Structure referenced in

М

Ma

Issue No.

Location \*

Start

39.328697°

-122.029262 °

O&M manual (Station 538+42). (USACE, 1955)

Rating \*\*

Issue Type +

FS Date: 04/22/2015

LM Start LM End

Category

Item

18		Photo
WS		
Longitude (		
End		Ş.
39.328697	0	
-122.029262	0	

18

GPS Latitude/Longit

DWR ID DWR\_MA0001\_01\_s \_ 2012\_18

Erosion / Bank Caving

Action/Comments

Note and monitor erosion site.

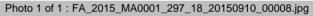
10.13

10.13

Earthen Levee

Inspector Comments: Monitor the erosion site.

No Photos





View of the erosion along the waterside of the levee.

## Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	10.21	Rating **	U	Issue No.		665	
LM End	10.21	Issue Type +	En	Location *		WS	
Category			GPS Latitude/Longitude				
Category				Start		End	
Item	DWR UCIP Field Study			39.32974	19 °	39.329749°	
пеш				-122.02960	)2 °	-122.029602 °	
DWR ID						·	

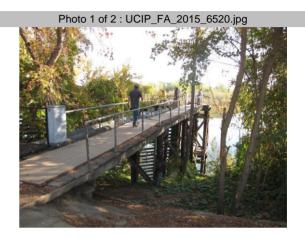
Action/Comments

Inspector Comments: FS\_ID:44651

DS\_ID:16453 EP\_NO: N/A FS\_HLM: 10.43 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Erosion happening near WS shoulder where the pipes enter the levee. May just be caused by rain runoff.Landward side has been completely altered. Need to find permit for new work.7/18/2013 Same as last inspection.12/17/2013 Same as last inspection.6/23/2014 Same as last inspection. FIELD\_STRUCT\_DESC: 24-inch steel pipe through levee. Gate valve on the waterward end. (USACE, 1955) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (538+42). FS Date: 04/22/2015





Dual 14-inch pipes along catwalk. 24-inch pipe crosses approximately 8 feet below catwalk floor.

Photo 2 of 2 : UCIP\_FA\_2015\_6521.jpg



Overview of levee crown looking upstream at multiple crossings.

# Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	10.21	Rating **	U	Issue No.	666		
LM End	10.21	Issue Type +	En	Location *	WS		
Category			GPS Latitude/Longitude				
Category				Start		End	
Item	DWR UCIP Field Study			39.3297	50 °	39.329750 °	
item	n			-122.0296	)2 °	-122.029602 °	
DWR ID							
Action/Comments							

Inspector Comments: FS\_ID:44663 DS\_ID:17571

DS\_ID:17571 EP\_NO: 1800 FS\_HLM: 10.43 Repair Type: Urgent Crossing Status: Found

LM Start	10.21	Rating **	U	Issue No.	666 (cont)
LM End	10.21	Issue Type +	En	Location *	WS



View of catwalk and pump station located on waterward side.



Photo 2 of 3: UCIP\_FA\_2015\_6494.jpg

View of waterward side looking at crossing.

## Levee Inspection Report By Mile - Fall 2015

#### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	10.21	Rating **	U	Issue No.		666 (cont)	
LM End	10.21	Issue Type +	En	Location *	WS		
Cotogony	Supplemental			GPS Latitude/Longitude			
Category				Start		End	
Item	DWR UC	WR UCIP Field Study			0 °	39.329750 °	
item	1			-122.02960	2 °	-122.029602 °	
DWR ID				'			
Action/Comments							

Action/Comme

Inspector Comments: FS\_ID:44663

DS\_ID:17571 EP\_NO: 1800 FS\_HLM: 10.43 Repair Type: Urgent Crossing Status: Found



Overview of levee crown looking upstream at crossing.

LM Start	10.21	Rating **	U	Issue No.		667
LM End	10.21	Issue Type +	En	Location *		WS
Category			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item	DWR UC	IP Field Study		39.3297	50°	39.329750 °
пеш				-122.0296	02 °	-122.029602 °
DWR ID						

#### Action/Comments

Inspector Comments: FS\_ID:44652

DS\_ID:16452 EP\_NO: 1800 FS\_HLM: 10.43 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/20/2015 Erosion happening near WS shoulder where the pipes enter the levee. May just be caused by rain runoff. This crossing has been completely modified--need recent permit issued to allow work on levee and levee toe. Was levee compacted to CVFPB standards? This crossing was listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0371 unable to determine why this crossing was assigned "U".7/18/2013 Same as last

inspection.12/17/2013 Same as last inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 1 of 2: 14-inch steel pipes through levee. Siphon breakers on the waterward end. (Permit No. 1800-1959,

Jimeno Rancho) FS Date: 04/22/2015





View of 2-14 inch crossings through levee on waterward side.

## Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	10.21	Rating **	U	Issue No.	667 (cont)		
LM End	10.21	Issue Type +	En	Location *	WS		
Category			GPS La	atitud	e/Longitude		
Calegory	Start		End				
Item	DWR UCIP Field Study			39.3297	50°	39.329750°	
пеш				-122.029602 ° -122.02			
DWR ID							
Action/Comments							
DS_ID:164 EP_NO: 1 FS_HLM: Repair Typ	452 800	:: FS_ID:4465 ind	2				

UCIP Comments: 4/20/2015 Erosion happening near WS shoulde where the pipes enter the levee. May just be caused by rain runoff.This crossing has been completely modified--need recent permit issued to allow work on levee and levee toe. Was levee compacted to CVFPB standards? This crossing was listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0371 unable to determine why this crossing was assigned "U".7/18/2013 Same as last

inspection.12/17/2013 Same as last inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 1 of 2: 14-inch steel pipes through levee. Siphon breakers on the waterward end. (Permit No. 1800-1959, Jimeno Rancho)

FS Date: 04/22/2015



Overview of levee crown looking upstream at crossing.

## Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	10.21	Rating **	U	Issue No.		667 (cont)
LM End	10.21	Issue Type + En Lo		Location *		WS
Category	ental	GPS La	atitud	le/Longitude		
Calegory						End
Item	DWR UC	IP Field Study		39.3297	50°	39.329750
пеш			-122.0296	02 °	-122.029602	
DWR ID						

#### Action/Comments

Inspector Comments: FS\_ID:44652

DS\_ID:16452 EP\_NO: 1800 FS\_HLM: 10.43 Repair Type: Urgent Crossing Status: Found

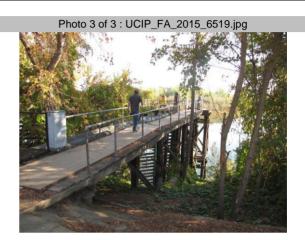
UCIP Comments: 4/20/2015 Erosion happening near WS shoulder where the pipes enter the levee. May just be caused by rain runoff. This crossing has been completely modified--need recent permit issued to allow work on levee and levee toe. Was levee compacted to CVFPB standards? This crossing was listed in the USACE Periodic Inspection as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0371 unable to determine why this crossing was assigned "U".7/18/2013 Same as last

inspection.12/17/2013 Same as last inspection.6/23/2014 Same as last inspection

last inspection.

FIELD\_STRUCT\_DESC: 1 of 2: 14-inch steel pipes through levee. Siphon breakers on the waterward end. (Permit No. 1800-1959, Jimeno Rancho)
FS Date: 04/22/2015



Catwalk, control panel, and pump station located on waterward side.

LM Start	10.32	Rating **	М	Issue No.		636	
LM End	10.32	Issue Type +	En	Location *		LS	
Cotogon Earthen Levee			GPS La	atitud	le/Longitude		
Category	legory			Start		End	
Item	Encroachments			39.3313	20°	39.331320 °	
пеш				-122.0299	32 °	-122.029932 °	
DWR ID	DWR_MA0	001_01_f _ 201	4_636				
Action/Comments							
Prunings							



View of the pruning along the landside toe.

# **Levee Inspection Report By Mile - Fall 2015**

# **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

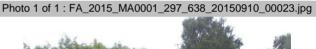
LM Start	10.78	Rating **	М	Issue No.		637
LM End	10.78	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Encroachments			39.3375	23 °	39.337523 °
пеш				-122.0324	37°	-122.032437 °
DWR ID	DWR_MA0	001_01_f _ 201	4_637			
		Action/	Comme	nts		
Prunings						

### Photo 1 of 1: FA\_2015\_MA0001\_297\_637\_20150910\_00022.jpg



View of the pruning along the landside toe.

LM Start	10.96	Rating **	М	Issue No.		638
LM End	10.96	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Item	Encroachments			39.3402	17°	39.340217 °
item				-122.0326	05 °	-122.032605 °
DWR ID	DWR_MA0	001_01_f _ 201	4_638			
		Action/	Comme	nts		
Prunings						





View of the pruning along the landside toe.

LM Start	11.01	Rating **	М	Issue No.		12		
LM End	11.01	Issue Type +	Ma	Location *		LS		
Category Earthen Levee				GPS La	atituc	de/Longitude		
				Start		End		
Vegetation			39.3407	74 °	39.340774	0		
пеш				-122.0328	72 °	-122.032872	0	
DWR ID	DWR_MA0	001_01_s _ 201	12_12					
		Action/	Comme	nts				
Elderberries are blocking visibility and flood fight capability.								

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	11.01 Rating ** M		Issue No.		668			
LM End	11.01	Issue Type + En		Location *		LS		
Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P Field Study		39.34086	7°	39.340867 °		
пеш					2 °	-122.032932 °		
DWR ID								

Action/Comments

Inspector Comments: FS\_ID:46049

DS\_ID:16449 EP\_NO: 187 FS\_HLM: 11.253 Repair Type: Non-Urgent Crossing Status: Found

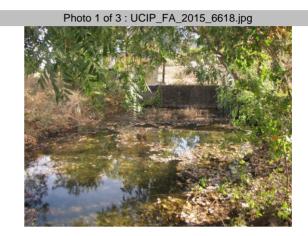
UCIP Comments: 4/21/2015 Same as last inspection. Need to determine if structure is still in use--contact owner. If abandoned structure--structure needs to be properly abandoned. This crossing was listed in the USACE Periodic Inspections as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0393 missing gate.7/18/2013

Same as last inspection.12/17/2013 Same as last inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 1 of 2: 52-inch CMP through levee. Slide gate on waterward side and flap gate on landward side. Concrete headwalls at both sides. This structure is associated with another abandoned structure located on waterward side. Abandoned structure includes pump house, multiple concrete walls, and 3 additional crossings (2-30 inch pipes and 1-48 inch pipe). (Permit No. 187-1921, Compton-Delevan Irrigation District-Maxwell I.D.) New pump and platform installed and old pump house removed under Permit No. 9183-1973.

FS Date: 04/22/2015



Drain channel inside ring levee.

## Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	11.01	Rating **	М	Issue No.		668 (cont)		
LM End	11.01	Issue Type +	En	Location *		LS		
Supplemental Supplemental				GPS Latitude/Longitude				
Calegory	Category					End		
Item	DWR UC	IP Field Study		39.3408	67 °	39.340867 °		
пеш	item			-122.0329	32 °	-122.032932 °		
DWR ID								

Action/Comments

Inspector Comments: FS\_ID:46049

DS\_ID:16449 EP\_NO: 187 FS\_HLM: 11.253 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/21/2015 Same as last inspection. Need to determine if structure is still in use--contact owner. If abandoned structure--structure needs to be properly abandoned. This crossing was listed in the USACE Periodic Inspections as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0393 missing gate.7/18/2013

Same as last inspection.12/17/2013 Same as last inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 1 of 2: 52-inch CMP through levee. Slide gate on waterward side and flap gate on landward side. Concrete headwalls at both sides. This structure is associated with another abandoned structure located on waterward side. Abandoned structure includes pump house, multiple concrete walls, and 3 additional crossings (2-30 inch pipes and 1-48 inch pipe). (Permit No. 187-1921, Compton-Delevan Irrigation District-Maxwell I.D.) New pump and platform installed and old pump house removed under Permit No. 9183-1973. FS Date: 04/22/2015

Photo 2 of 3: UCIP\_FA\_2015\_6619.jpg

View of abandoned structure located on waterward side (inside ring levee).

## Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	11.01	Rating **	М	Issue No.		668 (cont)			
LM End	<b>11.01</b> Issue Type + En		11.01 Issue Type + En Location *		ssue Type + En		LS		
Supplemental				GPS Latitude/Longitude					
Calegory	Category					End			
Item	DWR UCI	P Field Study		39.34086	67°	39.340867 °			
пеш		-		-122.03293	32 °	-122.032932 °			
DWR ID									

Action/Comments

Inspector Comments: FS\_ID:46049

DS\_ID:16449 EP\_NO: 187 FS\_HLM: 11.253 Repair Type: Non-Urgent Crossing Status: Found

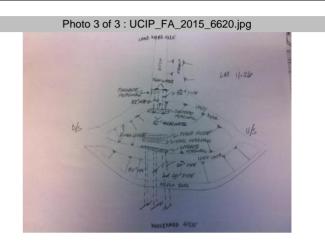
UCIP Comments: 4/21/2015 Same as last inspection. Need to determine if structure is still in use--contact owner. If abandoned structure--structure needs to be properly abandoned. This crossing was listed in the USACE Periodic Inspections as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0393 missing gate.7/18/2013

Same as last inspection.12/17/2013 Same as last inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 1 of 2: 52-inch CMP through levee. Slide gate on waterward side and flap gate on landward side. Concrete headwalls at both sides. This structure is associated with another abandoned structure located on waterward side. Abandoned structure includes pump house, multiple concrete walls, and 3 additional crossings (2-30 inch pipes and 1-48 inch pipe). (Permit No. 187-1921, Compton-Delevan Irrigation District-Maxwell I.D.) New pump and platform installed and old pump house removed under Permit No. 9183-1973.

FS Date: 04/22/2015



Sketch of structure located at levee mile 11.26.

## Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	11.02	Rating **	U	Issue No.		669		
LM End	11.02	Issue Type +	En	Location *		LS		
Supplemental				GPS Latitude/Longitude				
Calegory	Category					End		
Item	DWR UC	P Field Study		39.34097	'1 °	39.340971 °		
item				-122.03295	7°	-122.032957 °		
DWR ID					·			

Action/Comments

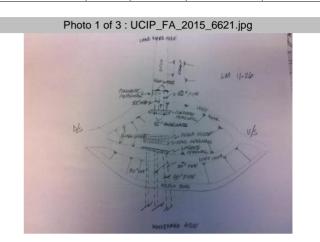
Inspector Comments: FS\_ID:46048

DS\_ID:17572 EP\_NO: 187 FS\_HLM: 11.26 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/21/2015 Same as last inspection. Missing positive closure device. Need to determine if structure is still in use--contact owner. If abandoned structure--structure needs to be abandoned. This crossing was listed in the USACE Periodic Inspections as ID# USACE\_CESPK\_MA1C\_2010\_p\_0393 missing gate.7/18/2013 Same as last inspection.12/17/2013 Same as last

inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 2 of 2: 52-inch CMP through levee. Slide gate on waterward side and flap gate on landward side. Concrete headwalls at both sides. This structure is associated with another abandoned structure located on waterward side. Abandoned structure includes pump house, multiple concrete walls, and 3 additional crossings (2-30 inch pipes and 1-48 inch pipe). (Permit No. 187-1921, Compton-Delevan Irrigation District-Maxwell I.D.) New pump and platform installed and old pump house removed under Permit No. 9183-1973. FS Date: 04/22/2015



Sketch of structure through levee ring located at levee mile 11.26.

N: Not Inspected/Rated Corrected A/W: Acceptable but Monitor & Maintain Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

En: Enforcement

## Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	11.02	Rating **	U	Issue No.		669 (cont)			
LM End	11.02	Issue Type +	En	Location *		LS			
Catagony	Supplemental				GPS Latitude/Longitude				
Calegory	Category					End			
Item	DWR UC	IP Field Study		39.34097	71 °	39.340971 °			
пеш				-122.03295	57 °	-122.032957 °			
DWR ID									

Action/Comments

Inspector Comments: FS\_ID:46048

DS\_ID:17572 EP\_NO: 187 FS\_HLM: 11.26 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/21/2015 Same as last inspection. Missing positive closure device. Need to determine if structure is still in use--contact owner. If abandoned structure--structure needs to be abandoned. This crossing was listed in the USACE Periodic Inspections as ID# USACE\_CESPK\_MA1C\_2010\_p\_0393 missing gate.7/18/2013 Same as last inspection.12/17/2013 Same as last

inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 2 of 2: 52-inch CMP through levee. Slide gate on waterward side and flap gate on landward side. Concrete headwalls at both sides. This structure is associated with another abandoned structure located on waterward side. Abandoned structure includes pump house, multiple concrete walls, and 3 additional crossings (2-30 inch pipes and 1-48 inch pipe). (Permit No. 187-1921, Compton-Delevan Irrigation District-Maxwell I.D.) New pump and platform installed and old pump house removed under Permit No. 9183-1973. FS Date: 04/22/2015



Concrete headwall with multiple crossings (2-30 inch pipes and 1-48 inch pipe).

## Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	11.02	Rating **	U	Issue No.		669 (cont)			
LM End	11.02	Issue Type +	En	Location *		LS			
Category	Category Supplemental				GPS Latitude/Longitude				
Calegory	Category					End			
Item	DWR UCI	IP Field Study		39.34097	71 °	39.340971 °			
пеш		·		-122.03295	57 °	-122.032957 °			
DWR ID									

Action/Comments

Inspector Comments: FS\_ID:46048

DS\_ID:17572 EP\_NO: 187 FS\_HLM: 11.26 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/21/2015 Same as last inspection. Missing positive closure device. Need to determine if structure is still in use--contact owner. If abandoned structure--structure needs to be abandoned. This crossing was listed in the USACE Periodic Inspections as ID# USACE\_CESPK\_MA1C\_2010\_p\_0393 missing gate.7/18/2013 Same as last inspection.12/17/2013 Same as last

inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 2 of 2: 52-inch CMP through levee. Slide gate on waterward side and flap gate on landward side. Concrete headwalls at both sides. This structure is associated with another abandoned structure located on waterward side. Abandoned structure includes pump house, multiple concrete walls, and 3 additional crossings (2-30 inch pipes and 1-48 inch pipe). (Permit No. 187-1921, Compton-Delevan Irrigation District-Maxwell I.D.) New pump and platform installed and old pump house removed under Permit No. 9183-1973. FS Date: 04/22/2015



Abandoned structure (multiple headwalls and pump structure) located near the lower levee (ring levee).

## Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	11.19	Rating **	U	Issue No.		670	
LM End	11.19	Issue Type +	En	Location *		LS	
Supplemental			GPS Latitude/Longitude				
Calegory	Category					End	
Item	DWR UCI	P Field Study		39.34326	3°	39.343263 °	
пеш		-		-122.03215	2 °	-122.032152 °	
DWR ID							

Action/Comments

Inspector Comments: FS\_ID:44669

DS\_ID:17691 EP\_NO: 17471 FS\_HLM: 11.432 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/21/2015 Sink hole still present between risers. Erosion between risers with slide gates located on waterward side; This crossing was listed in the USACE Periodic Inspections as ID# USACE\_CESPK\_MA1C\_2010\_p\_0398 for possible sinkhole between access gate structures.7/18/2013 Same as last inspection.12/17/2013 Same as last inspection.6/23/2014 Standing

water was present in the bottom of the sinkhole.

FIELD\_STRUCT\_DESC: 2 of 2: 24 inch diameter HDPE discharge pipes to be connected to the existing standpipe risers within the waterside and parallel to the right (west) bank levee of Sacramento River. (Permit 17471-2002, Maxwell Irrigation District)

FS Date: 04/22/2015

LM Start	11.19	Rating **	U	Issue No.	670 (cont)
LM End	11.19	Issue Type +	En	Location *	LS



View of concrete distribution box located on landward toe.

Photo 2 of 3: UCIP\_FA\_2015\_6822.jpg



Overview of levee crown looking downstream at crossing.

Location + Issue Type A : Acceptable M : Minima LS : Land Side Ma : Maintenance Deficiancy N/A: Not Applicable N: Not Inspected/Rated WS: Water Side Minimally Acceptable C : Corrected Ob: Design & System Obsolescence CR : Crown U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

## Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	11.19	Rating **	U	Issue No.	670 (cont)		
LM End	11.19	Issue Type +	En	Location *	LS		
Category	Suppleme	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UC	IP Field Study	,	39.34326	63 °	39.343263	0
item				-122.0321	52 °	-122.032152	0
DWR ID							
Action/Comments							

Action/Comments Inspector Comments: FS\_ID:44669

DS\_ID:17691 EP\_NO: 17471 FS\_HLM: 11.432 Repair Type: Urgent Crossing Status: Found



CMP risers located on waterward berm. 18-inch pipe corresponds to downstream riser with slide gate. 24-inch pipe corresponds to upstream riser with slide gate.

Photo 1 of 3: UCIP\_FA\_2015\_6818.jpg

LM Start	11.19	Rating **	U	Issue No.		671
LM End	11.19	Issue Type +	En	Location *		LS
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		39.3432	83 °	39.343283 °
item				-122.0321	45 °	-122.032145 °
DWR ID						

#### Action/Comments

Inspector Comments: FS\_ID:44668

DS\_ID:17624 EP\_NO: 17471 FS\_HLM: 11.431 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/21/2015 Sink hole still present between risers. Erosion between risers with slide gates located on waterward side; This crossing was listed in the USACE Periodic Inspections as ID# USACE\_CESPK\_MA1C\_2010\_p\_0398 for possible sinkhole between access gate structures.7/18/2013 Same as last inspection.12/17/2013 Same as last inspection.6/23/2014 Standing water was present in the bottom of the sinkhole.

FIELD\_STRUCT\_DESC: 1 of 2: 18 inch diameter HDPE discharge pipes to be connected to the existing standpipe risers within the waterside and parallel to the right (west) bank levee of Sacramento River. Pump station is located approximately 450 feet upstream of crossing. (Permit 17471-2002, Maxwell Irrigation District) FS Date: 04/22/2015



View of CMP risers located on waterward berm.

## Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	11.19	Rating **	U	Issue No.		671 (cont)
LM End	11.19	Issue Type +	En	Location *		LS
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory			Start		End	
Item	DWR UCI	P Field Study		39.34328	33 °	39.343283 °
пеш				-122.03214	15 °	-122.032145 °
DWR ID						

#### Action/Comments

Inspector Comments: FS\_ID:44668

DS\_ID:17624 EP\_NO: 17471 FS\_HLM: 11.431 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/21/2015 Sink hole still present between risers. Erosion between risers with slide gates located on waterward side; This crossing was listed in the USACE Periodic Inspections as ID# USACE\_CESPK\_MA1C\_2010\_p\_0398 for possible sinkhole between access gate structures.7/18/2013 Same as last inspection.12/17/2013 Same as last inspection.6/23/2014 Standing

water was present in the bottom of the sinkhole.

FIELD\_STRUCT\_DESC: 1 of 2: 18 inch diameter HDPE discharge pipes to be connected to the existing standpipe risers within the waterside and parallel to the right (west) bank levee of Sacramento River. Pump station is located approximately 450 feet upstream of crossing. (Permit 17471-2002, Maxwell Irrigation District)

FS Date: 04/22/2015



View of concrete distribution box located on landward toe.

## Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	11.19	Rating **	U	Issue No.		671 (cont)				
LM End	11.19	Issue Type +	En	Location *		LS				
Category	Supplemental					GPS Latitude/Longitude				
Calegory	gory			Start		End				
Item	DWR UCI	P Field Study		39.34328	33 °	39.343283 °				
пеш				-122.03214	15 °	-122.032145 °				
DWR ID										

Action/Comments

Inspector Comments: FS\_ID:44668

DS\_ID:17624 EP\_NO: 17471 FS\_HLM: 11.431 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/21/2015 Sink hole still present between risers. Erosion between risers with slide gates located on waterward side; This crossing was listed in the USACE Periodic Inspections as ID# USACE\_CESPK\_MA1C\_2010\_p\_0398 for possible sinkhole between access gate structures. 7/18/2013 Same as last inspection. 12/17/2013 Same as last inspection. 6/23/2014 Standing

water was present in the bottom of the sinkhole.

FIELD\_STRUCT\_DESC: 1 of 2: 18 inch diameter HDPE discharge pipes to be connected to the existing standpipe risers within the waterside and parallel to the right (west) bank levee of Sacramento River. Pump station is located approximately 450 feet upstream of crossing. (Permit 17471-2002, Maxwell Irrigation District)

FS Date: 04/22/2015



Overview of levee crown looking downstream at crossing.

Photo 1 of 1: FA\_2015\_MA0001\_297\_27\_20150910\_00012.jpg

11.21	Rating **	М	Issue No.		27
11.46	Issue Type +	En	Location *	LS	
Earthen L	evee		GPS La	atitud	le/Longitude
			Start		End
Encroach	croachments			42 °	39.347185 °
			-122.0321	07 °	-122.031525 °
DWR_MA0	001_01_s _ 201	12_27			
	Action/	Comme	nts		
	11.46 Earthen L Encroach	11.46 Issue Type + Earthen Levee Encroachments  DWR_MA0001_01_s _ 207	11.46 Issue Type + En Earthen Levee Encroachments  DWR_MA0001_01_s _ 2012_27	11.46         Issue Type +         En         Location *           Earthen Levee         GPS La           Start         Start           Encroachments         39.3435           -122.0321	11.46         Issue Type +         En         Location *           Earthen Levee         GPS Latitud           Start           Encroachments         39.343542 °           -122.032107 °           DWR_MA0001_01_s _ 2012_27



View of the ag. ditch along the L/S toe.

## Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	11.27	Rating **	М	Issue No.		672
LM End	11.27	Issue Type +	En	Location *		LS
Category	ental	GPS Latitude/Longitude				
Calegory			Start		End	
Item	DWR UCI	IP Field Study		39.3443	76 °	39.344376 °
пеш				-122.03179	92 °	-122.031792 °
DWR ID						·

Action/Comments

Inspector Comments: FS\_ID:44686

DS\_ID:20582 EP\_NO: N/A FS\_HLM: 11.512 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/21/2015 Same as last inspection. Need to

determine encroachment permit associated with this

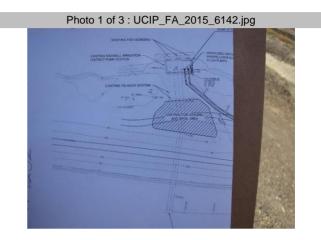
crossing.7/22/2013 Same as last inspection.12/17/2013 Same as

last inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 1 of 3: 24 inch discharge pipe through levee. Crossing is tied to existing Maxwell Irrigation District Pump Station located on waterward side. Siphon breaker inside CMP riser located on

landward shoulder. FS Date: 04/22/2015

LM Start	11.27	Rating **	М	Issue No.	672 (cont)
LM End	11.27	Issue Type +	En	Location *	LS



Drawing of existing Maxwell Irrigation District Conveyance Pipeline (DWG available through Permit No. 17471 for work located at LM 11.51).

Photo 2 of 3: UCIP\_FA\_2015\_6143.jpg



Pump station located on waterward side.

## Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	11.27	Rating **	М	Issue No.		672 (cont)	
LM End	11.27	Issue Type +	En	Location *		LS	
Category	Suppleme	ental		GPS La	titud	e/Longitude	
Calegory				Start	End		
Item	DWR UCIP Field Study			39.344376 °		39.344376 °	
пеш				-122.03179	92 °	-122.031792 °	
DWR ID	D						
Action/Comments							
Inspector Comments: FS_ID:44686							

DS\_ID:20582 EP\_NO: N/A FS\_HLM: 11.512 Repair Type: Non-Urgent Crossing Status: Found



Overview of levee crown looking downstream at crossing.

LM Start	11.27	Rating **	М	Issue No.		673
LM End	11.27	Issue Type +	En	Location *		LS
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UCI	P Field Study		39.3443	90°	39.344390 °
iteiii				-122.0317	87 °	-122.031787 °
DWR ID						

Action/Comments

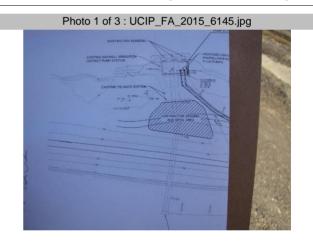
Inspector Comments: FS\_ID:44687

DS\_ID:20583 EP\_NO: N/A FS\_HLM: 11.513 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/21/2015 Same as last inspection.Need to determine encroachment permit for this crossing.7/22/2013 Same as last inspection.12/17/2013 Same as last inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 2 of 3: 24 inch discharge pipe through levee. Crossing is tied to existing Maxwell Irrigation District Pump Station located on waterward side. Siphon breaker inside CMP riser located on landward shoulder.

FS Date: 04/22/2015



Drawing of existing Maxwell Irrigation District Conveyance Pipeline (DWG available through Permit No. 17471 for work located at LM 11.51).

## Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	11.27	Rating **	М	Issue No.		673 (cont)	
LM End	11.27	Issue Type +	En	Location *	LS		
Category	GPS Latitude/Longitude						
Calegory			Start		End		
Item	DWR UCI	IP Field Study		39.34439	0 °	39.344390	٥
item				-122.03178	7 °	-122.031787	0
DWR ID					·		

Action/Comments

Inspector Comments: FS\_ID:44687

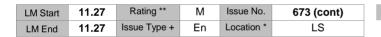
DS\_ID:20583 EP\_NO: N/A FS\_HLM: 11.513 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/21/2015 Same as last inspection.Need to determine encroachment permit for this crossing.7/22/2013 Same as last inspection.12/17/2013 Same as last inspection.6/23/2014

Same as last inspection.

FIELD\_STRUCT\_DESC: 2 of 3: 24 inch discharge pipe through levee. Crossing is tied to existing Maxwell Irrigation District Pump Station located on waterward side. Siphon breaker inside CMP riser located on landward shoulder.

FS Date: 04/22/2015





Pump Station located on waterward side.

Photo 3 of 3: UCIP\_FA\_2015\_6147.jpg



Maxwell Irrigation District Pump Station located on waterward side.

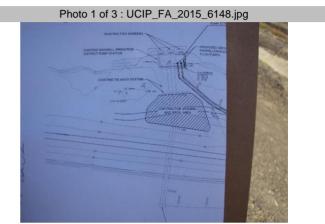
# Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	11.27	Rating **	М	Issue No.		674
LM End	11.27	Issue Type +	En	Location *		LS
Category	Supplemental				atitud	le/Longitude
Category				Start		End
Item	DWR UCIP Field Study			39.3444	° 00	39.344400 °
пеш					85 °	-122.031785 °
DWR ID						
		Action/	Comme	nts		
Inspector (DS_ID:205 EP_NO: N FS_HLM: Repair Typ Crossing S	584 /A 11.514 be: Non-Ur		9			

LM Start	11.27	Rating **	М	Issue No.	674 (cont)
LM End	11.27	Issue Type +	Fn	Location *	LS



Drawing of existing Maxwell Irrigation District Conveyance Pipeline (DWG available through Permit No. 17471 for work located at LM 11.51).



Maxwell Irrigation District Pump Station located on waterward side.

# Levee Inspection Report By Mile - Fall 2015

# **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	11.27	Rating **	М	Issue No.	674 (cont)			
LM End	11.27	Issue Type +	En	Location *		LS		
Supplemental				GPS La	atitud	le/Longitude		
Category				Start		End		
Item	DWR UCIP Field Study			39.3444	00°	39.344400 °		
пеш	item				85 °	-122.031785 °		
DWR ID								
		Action/	Comme	nts				
Inspector (	Comments	: FS ID:4468	9					
DS ID:205	584	_						
EP_NO: N	EP NO: N/A							
FS_HLM: 11.514								
Repair Type: Non-Urgent								
Crossing S	Status: Fou	ind						

Photo 3 of 3 : UCIP\_FA\_2015\_6305.jpg

Maxwell Irrigation District Pump Station located on waterward side.

LM Start	11.74	Rating **	М	Issue No.		23		
LM End	11.79	Issue Type +	En	Location *	LS			
Category	evee	GPS La	atitud	e/Longitude				
Category				Start		End		
Vegetation				39.3511	55 °	39.351832 °		
пеш				-122.030443 °		3 ° -122.030295 °		
DWR ID	DWR_MA0	001_01_s _ 201	12_23					
		Action/	Comme	nts				
Landscapi	Landscaping							

No Photos

## Levee Inspection Report By Mile - Fall 2015

# **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	12.06	Rating **	М	Issue No.		675	
LM End	12.06	Issue Type +	En	Location *	LS		
Category	ental	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UCI	IP Field Study		39.3555	16°	39.355516 °	
пеш				-122.02870	00°	-122.028700 °	
DWR ID						·	

Action/Comments

Inspector Comments: FS\_ID:44690

DS\_ID:16457 EP\_NO: 13449 FS\_HLM: 12.32 Repair Type: Nor

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/21/2015 Same as last inspection.11/2012 Buried line. No markers found; Need to contact PG&E to determine if crosssing is still present.12/2012 According to PG&E, their records indicate that pipe segment has been retired per dwgs. PG&E is finding additional information to confirm if crossing has been retired and method of retirement. Waiting for clarification from PG&E.7/22/2013 Same as last inspection.12/17/2013 Same as last inspection.6/23/2014 Same as last inspection.
FIELD\_STRUCT\_DESC: 4-inch gas pipeline through levee, 30-inches

FIELD\_STRUCT\_DESC: 4-inch gas pipeline through levee, 30-inches below crown. PG&E crossing is known as reference no. 167-6-13. (Permit No. 13449-1983, PG&E) Emergency contact Mr. Monte Penland, Gas Maintenance Supervisor, 15871 Central Street, Meridian, CA 95957; Office No. 530-634-6520 or Mobile No. 530-356-7396. Coordinates are approximate,

FS Date: 04/22/2015

LM Start	12.06	Rating **	М	Issue No.		4	
LM End	13.10	Issue Type +	En	Location *		LS	
Category Earthen Levee				GPS La	atitud	le/Longitude	
Calegory				Start		End	
ltem Encroachments				39.355607°		39.362600 °	
item				-122.028707 °		° -122.014497	
DWR ID	DWR_MA0	001_01_s _ 201	12_4				
Action/Comments							
Ditch							

No Photos

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W: Acceptable but Monitor & Maintain	En : Enforcement

# Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	12.27	Rating **	М	Issue No.	78		_
LM End	12.27	Issue Type +	Ma	Location *	WS		
Category	Earthen L	rthen Levee			GPS Latitude/Longitude		
Calegory				Start		End	
Item	Animal Control			39.35749	97 °	39.357497	0
item				-122.02609	93 °	-122.026093	0
DWR ID	DWR_MA0	001_01_f _ 201	5_78				
Action/Comments							
End amondance		I I I CH -			1		

Exterminate rodents and backfill and compact or grout burrows.

#### Photo 1 of 1: FA\_2015\_MA0001\_297\_78\_20151013\_00027.jpg



View of the rodent holes along the waterside slope.

LM Start	12.49	Rating **	М	Issue No.		79	
LM End	12.49	Issue Type +	Ma	Location *	WS		
Category	Earthen L	evee		GPS Lat	tud	le/Longitude	
Category				Start Er			
Item	Animal Co	nimal Control		39.35950	°	39.359500 °	
пеш				-122.02298	°	-122.022980 °	
DWR ID DWR_MA0001_01_f _ 2015_79							
		Action/	Comme	nts			

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

### Photo 1 of 1: FA\_2015\_MA0001\_297\_79\_20151013\_00028.jpg



View of the rodent holes along the waterside slope.

## Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	12.69	Rating **	М	Issue No.		676
LM End	12.69	Issue Type +	En	Location *		WS
Category	Supplemental			GPS Latitude/Longitude		
Calegory						End
Item	DWR UC	P Field Study	P Field Study			39.359843 °
item				-122.01952	9 °	-122.019529 °
DWR ID						

Action/Comments

Inspector Comments: FS\_ID:44694

DS\_ID:16445 EP\_NO: 9462 FS\_HLM: 12.963 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/21/2015 Same as last inspection. Slide gate unoperable-blocked by sediment. LS-flap gate missing. 5-inch pipe goes through 24-inch crossing--unable to determine is authorized. This crossing was listed in the USACE Periodic Inspections as ID# USACE\_CESPK\_MA1C\_2010\_p\_0435 for smaller pipe running inside existing crossing.7/22/2013 Same as last inspection.12/17/2013 Same as last inspection. 5/23/2014 Same as last inspection. FIELD\_STRUCT\_DESC: 24-inch corrugated metal pipe through levee. Slide gate on both ends. (ABO No. 9462-1974, Thousand Acre Ranch) FS Date: 04/22/2015



6-inch irrigation pipe through crossing at landward side. Flap gate missing.

 LM Start
 12.69
 Rating \*\*
 M
 Issue No.
 676 (cont)

 LM End
 12.69
 Issue Type +
 En
 Location \*
 WS

Photo 2 of 3: UCIP\_FA\_2015\_6307.jpg



WS concrete structure with slide gate. Gate is blocked by sediment.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable CR: Corrected U: Unacceptable U: Unacceptable WA: Acceptable but Monitor & Maintain

\*\* Rating

A: Asceptable N: Not Inspected/Rated Ma: Maintenance Deficiancy Ob: Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	12.69	Rating **	М	Issue No.		676 (cont)			
LM End	12.69	Issue Type +	En	Location *		WS			
Category	Supplemental			GPS La	GPS Latitude/Longitude				
Calegory				Start		End			
Item	DWR UC	IP Field Study	,	39.35984	3°	39.359843 °			
пеш			Start         I           Field Study         39.359843 °         39	-122.019529 °					
DWR ID									
		A -4:/	C	-1-					

Action/Comments

Inspector Comments: FS\_ID:44694

DS\_ID:16445 EP\_NO: 9462 FS\_HLM: 12.963 Repair Type: Non-Urgent Crossing Status: Found



Overview of levee crown looking downstream at crossing.

LM Start	13.47	Rating **	U	Issue No.		677		
LM End	13.47	Issue Type +	En	Location *		WS		
Category	Supplemental			GPS Latitude/Longitude				
Calegory			GPS Latitude/Longitude Start End eld Study 39.367643 ° 39.367	End				
Item	DWR UCI	P Field Study	39.3676	43 °	39.367643 °			
пеш				-122.0152	12 °	-122.015212 °		
DWR ID								

#### Action/Comments

Inspector Comments: FS\_ID:44700

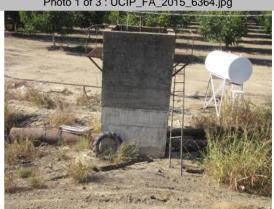
DS ID:16443 EP\_NO: 9461 FS\_HLM: 13.756 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/21/2015 Same as last inspection. Unable to close positive closure device due to missing ladder-sluce gate inaccessible. Need to determine the condition of the gate. This crossing was listed in the USACE Periodic Inspections as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0453 for an inaccessible gate box with its ladder broken on the waterward side.7/22/2013 Same as last inspection.12/17/2013 Same as last inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 36 inch corrugated metal pipe through levee, 21.5 feet below crown. Slide gate in concrete box on waterward end. Pump on the bank. (ABO No. 9461-1974, Annie D. Propfe) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 710+82). FS Date: 04/22/2015

Photo 1 of 3: UCIP\_FA\_2015\_6364.jpg



Concrete distribution box located on landward toe.

### **Levee Inspection Report By Mile - Fall 2015**

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	13.47	Rating **	U	Issue No.		677 (cont)		
LM End	13.47	Issue Type +	En	Location *		WS		
Category	Category Supplemental			GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	IP Field Study	P Field Study			39.367643 °		
пеш				-122.0152°	12 °	-122.015212 °		
DWR ID								

Action/Comments

Inspector Comments: FS\_ID:44700

DS\_ID:16443 EP\_NO: 9461 FS\_HLM: 13.756 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/21/2015 Same as last inspection. Unable to close positive closure device due to missing ladder-sluce gate inaccessible. Need to determine the condition of the gate. This crossing was listed in the USACE Periodic Inspections as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0453 for an inaccessible gate box with its ladder broken on the waterward side.7/22/2013 Same as last inspection.12/17/2013 Same as last inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 36 inch corrugated metal pipe through levee, 21.5 feet below crown. Slide gate in concrete box on waterward end. Pump on the bank. (ABO No. 9461-1974, Annie D. Propfe) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 710+82).

FS Date: 04/22/2015



View of waterward side at crossing.

# Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	13.47	Rating **	U	Issue No.		677 (cont)	
LM End	13.47	Issue Type +	En	Location *		WS	
Category	Suppleme		GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.36764	43 °	39.367643	
пеш				-122.01521	12 °	-122.015212 °	
DWR ID							

#### Action/Comments

Inspector Comments: FS\_ID:44700

DS\_ID:16443 EP\_NO: 9461 FS\_HLM: 13.756 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/21/2015 Same as last inspection. Unable to close positive closure device due to missing ladder-sluce gate inaccessible. Need to determine the condition of the gate. This crossing was listed in the USACE Periodic Inspections as ID#

USACE\_CESPK\_MA1C\_2010\_p\_0453 for an inaccessible gate box with its ladder broken on the waterward side.7/22/2013 Same as last inspection.12/17/2013 Same as last inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 36 inch corrugated metal pipe through levee, 21.5 feet below crown. Slide gate in concrete box on waterward end. Pump on the bank. (ABO No. 9461-1974, Annie D. Propfe) This entry matches the Drainage and Irrigation Structure referenced in O&M manual (Station 710+82).

FS Date: 04/22/2015



View of landward side looking downstream at crossing.

LM Start	13.78	Rating **	М	Issue No.	sue No. <b>678</b>			
LM End	13.78	Issue Type +	En	Location *		WS		
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P Field Study		39.3719	34 °	39.371934		
пеш				-122.0129	45 °	-122.012945		
DWR ID	DWR ID							
Action/Comments								

Inspector Comments: FS\_ID:44709

DS\_ID:16442 EP\_NO: N/A FS\_HLM: 14.083 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/21/2015 Slide gate is still buried.Slide gate is buried-non-fuctional. This crossing was listed in the USACE Periodic Inspections as ID# USACE\_CESPK\_MA1C\_2010\_p\_0457 for buried slide gate.7/22/2013 Same as last inspection.12/17/2013 Same as

last inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: Abandoned 36-inch corrugated metal pipe through levee. Slide gate on waterward end. (Davis Ranches)

FS Date: 04/22/2015



Overview of levee crown looking downstream at crossing.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	13.78	Rating **	М	Issue No.		678 (cont)			
LM End	13.78	Issue Type +	En	Location *		WS			
Category	Supplemental				GPS Latitude/Longitude				
Calegory				Start		End			
Item	DWR UCI	IP Field Study		39.37193	4 °	39.371934	0		
пеш			-122.01294	5 °	-122.012945	0			
DWR ID									

Action/Comments

Inspector Comments: FS\_ID:44709

DS\_ID:16442 EP\_NO: N/A FS\_HLM: 14.083 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/21/2015 Slide gate is still buried.Slide gate is buried-non-fuctional. This crossing was listed in the USACE Periodic Inspections as ID# USACE\_CESPK\_MA1C\_2010\_p\_0457 for buried slide gate.7/22/2013 Same as last inspection.12/17/2013 Same as last inspection.6/23/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: Abandoned 36-inch corrugated metal pipe

through levee. Slide gate on waterward end. (Davis Ranches)

FS Date: 04/22/2015



Slide gate buried-non-functional.

LM Start	14.28	Rating **	М	Issue No.		679
LM End	14.28	Issue Type +	En	Location *	WS	
Category	ental	GPS Latitude/Longitude				
Calegory				Start		End
Item	DWR UCI	P Field Study		39.37856	88°	39.378568 °
пеш				-122.01326	62 °	-122.013262 °
DWR ID						

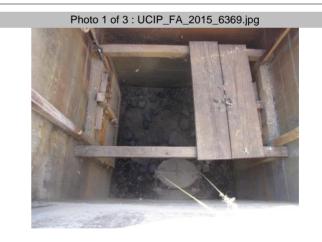
Action/Comments
Inspector Comments: FS\_ID:44714

DS\_ID:16441 EP\_NO: 9460 FS\_HLM: 14.59 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/21/2015 Same as last inspection. Need to determine if crossing is still being used there are some abandoned features that remain at this crossing--crossing has been modified. This crossing was listed in the USACE Periodic Inspections as ID# USACE\_CESPK\_MA1C\_2010\_p\_0464 for abandoned pump station.7/22/2013 Same as last inspection.12/17/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 18-inch steel pipe through levee. Gate valve on the waterward end. Pump house on the waterward berm. Concrete distribution box and flap gate at the landward toe. (ABO No. 9460-1974, Morici Corporation)

FS Date: 04/22/2015



Inside view of concrete distribution box located on landward toe.

\*Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated C: Corrected M: Minimally Acceptable U: Unacceptable U: Unacceptable W: Acceptable W: Accepta

## Levee Inspection Report By Mile - Fall 2015

## **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	14.28	Rating **	М	Issue No.		679 (cont)			
LM End	14.28	Issue Type +	En	Location *		WS			
Category	Supplemental				GPS Latitude/Longitude				
Calegory				Start		End			
Item	DWR UCI	P Field Study		39.37856	88°	39.378568 °			
пеш				-122.01326	62 °	-122.013262 °			
DWR ID									

Action/Comments

Inspector Comments: FS\_ID:44714

DS\_ID:16441 EP\_NO: 9460 FS\_HLM: 14.59

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/21/2015 Same as last inspection.Need to determine if crossing is still being used there are some abandoned features that remain at this crossing--crossing has been modified. This crossing was listed in the USACE Periodic Inspections as ID# USACE\_CESPK\_MA1C\_2010\_p\_0464 for abandoned pump station.7/22/2013 Same as last inspection.12/17/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 18-inch steel pipe through levee. Gate valve on the waterward end. Pump house on the waterward berm. Concrete distribution box and flap gate at the landward toe. (ABO No. 9460-1974, Morici Corporation)

FS Date: 04/22/2015

LM Start	14.28	Rating **	М	Issue No.	679 (cont)
LM End	14.28	Issue Type +	En	Location *	WS



Concrete distribution box located on landward toe.

Photo 3 of 3: UCIP\_FA\_2015\_6504.jpg



View of levee crown looking downstream at crossing.

# **Levee Inspection Report By Mile - Fall 2015**

# **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Otant	16.08	Rating **	U	Issue No.		14	
LM Start							
LM End	16.08	Issue Type +	En	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Encroach	ments		39.4039	30°	39.403930 °	
item				-122.008925 °		° -122.008925 °	
DWR ID	DWR_MA0	001_01_s _ 201	12_14				
		Action/	Comme	nts			
Building							



View of the building on the waterside slope.

-						
LM Start	16.10	Rating **	U	Issue No.		26
LM End	16.10	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Encroach	Encroachments			35 °	39.404135 °
item				-122.008797 °		-122.008797 °
DWR ID	DWR_MA0	001_01_s _ 201	12_26			
		Action/	Comme	nts		
Building						



View of the building on the landside slope.

LM Start	16.10	Rating **	М	Issue No.	74			
LM End	16.10	Issue Type +	En	Location *	LS			
Category	Earthen L	evee		GPS Latitude/Longitude				
Category			Start		End			
Item	Encroachments			39.4042	55 °	39.404255 °		
item			-122.008842 °		-122.008842 °			
DWR ID	DWR_MA0	001_01_s _ 201	15_74					
	Action/Comments							
Landscape Irrigation Inspector Comments: Remove the landscape from the landside slope and toe.								



View of the landscape along the landside slope and toe.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2015

# **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	16.30	Rating **	М	Issue No.		15	
LM End	16.32	Issue Type +	En	Location *		LS	
Category Earthen Levee			GPS La	atitud	le/Longitude		
			Start		End		
Item	Encroachments			39.407066 °		39.407363 °	
пеш				-122.0087	30°	-122.008780 °	
DWR ID	DWR_MA0	001_01_s _ 201	12_15				
		Action/	Comme	nts			
Building							

No Photos

LM Start 16.31 Rating \*\* Issue No. 46 LM End 16.33 Issue Type + En Location \* LS Earthen Levee GPS Latitude/Longitude Category Start End Encroachments 39.407225 ° 39.407545° Item -122.008570 ° -122.008640 ° DWR ID DWR\_MA0001\_01\_s \_ 2012\_46 Action/Comments Building

Photo 1 of 1: FA\_2015\_MA0001\_297\_46\_20150910\_00013.jpg



View of the building along the landside toe.

Photo 1 of 1: FA\_2015\_MA0001\_297\_47\_20150910\_00014.jpg

LM Start	16.34	Rating **	U	Issue No.		47	
LM End	16.35	Issue Type +	En	Location *	LS		
Category	Earthen Levee GPS Latitude/Longitude				le/Longitude		
Category			Start		End		
Item	Encroachments			39.4076	70°	39.407823 °	
item	item			-122.008685 °		-122.008740 °	
DWR ID	DWR_MA0	001_01_s _ 201	12_47				
		Action/	Comme	nts			
Fence							
1							



View of the fence along the landside toe.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	16.35	Rating **	М	Issue No.	9		
LM End	16.58	Issue Type +	Ma	Location *	WS		
Category Supplemental			GPS Latitude/Longitude				
				Start		End	
Itom		CE Erosion S	Survey,	39.407837 °		39.411111 °	
Item DRAFT				-122.00876	33°	-122.009238 °	
DWR ID							
	Action/Comments						

Inspector Comments: Erosion site added in 1997 and removed in 2005. 2009 - Site added back in, hard toe with slow moving erosion. Potential geotechnical failure. 2011 - Site extended downstream. 2015: Last observed in 2013. [2015 Site ID: SAC\_164-3\_R]

LM Start	16.35	Rating **	М	Issue No.	9 (cont)
LM End	16.58	Issue Type +	Ma	Location *	WS



USACE 2013 Photo #1



USACE 2013 Photo #2

LM Start	16.49	Rating **	М	Issue No.		680	
LM End	16.49	Issue Type +	En	Location *	WS		
Category	Suppleme	ental	GPS Latitude/Longitude				
Category			Start		End		
Item	DWR UC	WR UCIP Field Study			39.409758°		0
пеш				-122.009562 °		-122.009562	0
DWR ID							
		Action/	Comme	nts			
Inspector (DS_ID:164 EP_NO: 2	138	:: FS_ID:4471	7				

FS\_HLM: 16.85 Repair Type: Non-Urgent

Crossing Status: Found

No Photos

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	16.55	Rating **	М	Issue No.		681	
LM End	16.55	Issue Type +	En	Location *		WS	
Supplemental			GPS Latitude/Longitude				
Category				Start		End	
Item	DWR UCIP Field Study			39.41064	15 °	39.410645 °	
пеш				-122.00970	)5 °	-122.009705 °	
DWR ID							

Action/Comments

Inspector Comments: FS\_ID:44719

DS\_ID:16448 EP\_NO: 14424 FS\_HLM: 16.913 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/21/2015 Same as last inspection.11/3/2014 (DWR-Olivia) Need to contact owner to determine when markers will be placed. 6/23/2014 Same as last inspection.12/17/2013 Same as last inspection.11/2012 Utility warning sign damaged. Olivia (UCIP team) is coordinating with PG&E to determine more info on crossing. 12/2012 Waiting for information regarding crossing from PG&E. Regarding damage warning sign--PG&E has initiated a project to replace pipeline crossing sign and utility markers, as required by DOT codes/regulations.

FIELD\_STRUCT\_DESC: 12-inch gas pipeline through levee, 30-inches below crown. This 12-inch replacement pipe was installed by horizontally directionally drilling under the State HWY. Crossing is cathodically protected against external corrosion. (Permit No. 14424-1988, PG&E) Emergency contact Monte Penland, Gas Maintenance Supervisor, 15871 Central Street, Meridian, CA 95957; Office No. 530-634-6520 or Mobile No. 530-356-7396. Utility crossing coordinates are approximate. This pipe is under pressure and cathodic protection (CP) readings are taken on a regular schedule.

FS Date: 04/22/2015



View of utility marker located on landward side across hwy.

## Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	16.55	Rating **	М	Issue No.		681 (cont)	
LM End	16.55	Issue Type +	En	Location *	WS		
Category Supplemental				GPS Latitude/Longitude			
				Start		End	
Item	DWR UCIP Field Study			39.41064	45 °	39.410645 °	
item				-122.00970	)5 °	-122.009705 °	
DWR ID							

Action/Comments

Inspector Comments: FS\_ID:44719

DS\_ID:16448 EP\_NO: 14424 FS\_HLM: 16.913 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/21/2015 Same as last inspection.11/3/2014 (DWR-Olivia) Need to contact owner to determine when markers will be placed. 6/23/2014 Same as last inspection.12/17/2013 Same as last inspection7/22/2013 Same as last inspection.11/2012 Utility warning sign damaged. Olivia (UCIP team) is coordinating with PG&E to determine more info on crossing. 12/2012 Waiting for information regarding crossing from PG&E. Regarding damage warning sign-PG&E has initiated a project to replace pipeline crossing sign and utility markers, as required by DOT codes/regulations.

FIELD\_STRUCT\_DESC: 12-inch gas pipeline through levee, 30-inches below crown. This 12-inch replacement pipe was installed by horizontally directionally drilling under the State HWY. Crossing is cathodically protected against external corrosion. (Permit No. 14424-1988, PG&E) Emergency contact Monte Penland, Gas Maintenance Supervisor, 15871 Central Street, Meridian, CA 95957; Office No. 530-634-6520 or Mobile No. 530-356-7396. Utility crossing coordinates are approximate. This pipe is under pressure and cathodic protection (CP) readings are taken on a regular schedule.

FS Date: 04/22/2015



View just upstream of utility crossing.

## Levee Inspection Report By Mile - Fall 2015

### **Sutter Maintenance Yard Maintenance Area 0001**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	16.76	09/16/2015 09/16/2015	Bob Duffey

LM Start	16.55	Rating **	М	Issue No.		681 (cont)	
LM End	16.55	Issue Type +	En	Location *	WS		
Category Supplemental				GPS Latitude/Longitude			
				Start		End	
Item	DWR UCIP Field Study			39.41064	45 °	39.410645 °	
item				-122.00970	)5 °	-122.009705 °	
DWR ID							

#### Action/Comments

Inspector Comments: FS\_ID:44719

DS\_ID:16448 EP\_NO: 14424 FS\_HLM: 16.913 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/21/2015 Same as last inspection.11/3/2014 (DWR-Olivia) Need to contact owner to determine when markers will be placed. 6/23/2014 Same as last inspection.12/17/2013 Same as last inspection.7/22/2013 Same as last inspection.11/2012 Utility warning sign damaged. Olivia (UCIP team) is coordinating with PG&E to determine more info on crossing. 12/2012 Waiting for information regarding crossing from PG&E. Regarding damage warning sign-PG&E has initiated a project to replace pipeline crossing sign and utility markers, as required by DOT codes/regulations.

FIELD\_STRUCT\_DESC: 12-inch gas pipeline through levee, 30-inches below crown. This 12-inch replacement pipe was installed by horizontally directionally drilling under the State HWY. Crossing is cathodically protected against external corrosion. (Permit No. 14424-1988, PG&E) Emergency contact Monte Penland, Gas Maintenance Supervisor, 15871 Central Street, Meridian, CA 95957; Office No. 530-634-6520 or Mobile No. 530-356-7396. Utility crossing coordinates are approximate. This pipe is under pressure and cathodic protection (CP) readings are taken on a regular schedule.

FS Date: 04/22/2015



View of levee looking downstream at crossing.

\*\* Rating

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable A: Acceptable C: Corrected

N: Not Inspected/Rated C: Corrected

C: Corrected

AW: Acceptable but Monitor & Maintain

\*\* Rating

A: Asceptable A: Acceptable C: Corrected

AW: Acceptable but Monitor & Maintain

\*\* Rating

A: Issue Type

Ma: Maintenance Deficiancy

Ob: Design & System Obsolescence

En: Enforcement